

UConn THE DEPARTMENT OF STATISTICS

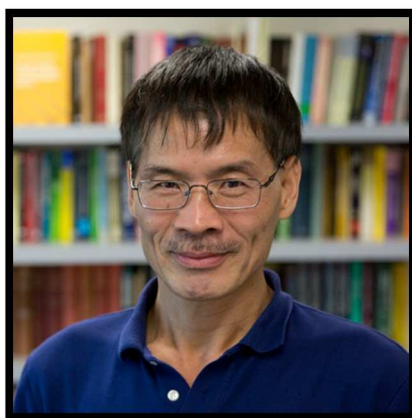
FALL 2018 NEWSLETTER



Table of Contents

A Message from the Department Head	3
From the Director of the Graduate Program	6
From the Director of the Undergraduate Program	7
Selected Faculty Activities	8
From the Director of the Statistical Consulting Services	40
Travelers Grant Update	43
An Update from the New England Statistical Society	44
New England Statistical Society Membership Form	50
UConn Statistics Biopharmaceutical Summer Academy	51
Annual Department Picnic and Graduate Student Awards	58
Colloquia	61
Math Alliance	64
Paper of the Month	64
Pfizer/ASA/UConn Distinguished Colloquium Series	65
BMCA 2018 In Honor of Professor Lynn Kuo's Birthday	66
Stochastic Process Conference in Honor of Dipak Dey's Birthday	67
IWAP 2018	68
Alumni News	69
Student News	70
Central Utility Plant Consulting Project	72
Alumni Reply Form	73
Department Directory	73

A Message from the Department Head



Welcome to the twenty-first issue of our Department Newsletter. We had another busy year (fall 2017-spring 2018). It was sad to see that Megan Petsa left the Department to become a Graduate Student Services Coordinator at the Graduate School in January 2018. Megan had been Program Assistant II in the Department for the past five years. After staying in the Department as a Visiting Assistant Professor for the past two years, Panpan Zhang started a new position at the University of Pennsylvania in August 2018. I would like to welcome Anthony Luis to join the Department as Program Assistant in spring 2018. Anthony is a nice addition to the Department. The department continues to

grow and blossom in all aspects. Currently, we have 20 tenure and tenure-tracked faculty members, one visiting assistant professor, three lecturers, four adjunct faculty members, and nine faculty members from UCHC, Computer science & Engineering, Ecology and Evolutionary Biology, Allied Health Science, Mathematics, and Nursing Instruction and Research, who have joint appointments with Statistics, and 1 postdoc. In fall 2018, we also have 170 graduate students enrolled in our graduate program, of whom 51 have received financial support, 162 Stat major or double major undergraduate students, 103 Math-Stat major or double major undergraduate students, and 99 Stat minor undergraduate students.

I would like to congratulate Nitis Mukhopadhyay for receiving the prestigious Honorary Fellowship from the Institute of Applied Statistics Sri Lanka (IASL) for his broad ranging contributions and service towards IASSL in December 2017. Also congratulate Dipak K. Dey for receiving a prestigious 2018 Distinguished Science Alumni Award by College of Science, Purdue University and the 2018 Don Owen Award conferred by the San Antonio Chapter and presented to Dipak on April 13, 2018 during the 38th annual Conference of Texas Statisticians. In May 2018, Ofer Harel was elected the Chair-Elect for the Council of Sections Governing Board of ASA, effective January 2019. Congratulate Elizabeth Schifano and Yuping Zhang being an elected member of the International Statistical Institute in September 2018. HaiYing Wang received an NSF grant in July 2018. HaiYing's research was also funded by the Research Excellence Program of UConn Office of Vice President for Research (OVPR). Very proud of our faculty's achievements.

A team of UConn undergraduates (Team 3squRIs) Adam Busa (Mathematics-Statistics 2018), Aleya Hafez (Mathematics-Statistics 2018) and Tom Kennon (Statistics 2018) won an award for "Best Data Integration" at the American Statistical Association (ASA) Datafest competition, held at Wesleyan University from April 6-8. These undergraduate students were advised by Professor Ofer

Harel, Professor Nalini Ravishanker, and graduate student Wenjie Wang. Also in attendance to support the UConn team were graduate students, Austin Menger and former graduate (and participant) Sam Schick. Our undergraduate students, Emma Fern Barringham, Justin Ronald Brockway, Xiaotong Li, Alyssa Orlofsky, and Xuan Ren were inducted into Phi Beta Kappa in April 2018. Congratulations to these students for their hard work and academic excellence!

During the 2018 JSM, UConn Statistics Department Alumni and Friends Lunch was successfully held in Mackenzie II, the Fairmont Waterfront Vancouver, 900 Canada Place Way, Vancouver, British Columbia, Canada on August 1, 2018. Over 46 guests attended the lunch. I would like to thank our staff Tracy Burke and Andrew Kim of the Alumni Relations, College of Liberal Arts and Sciences, for organizing this event and developing the registration website. I expect that we will host another Department Alumni and Friends Lunch during the 2019 JSM in Denver. Also, at the 2018 JSM, Department alumni Dooti Roy, Gregory Vaughan, Jianan Hui, and Junxian Geng won the Professional Category of Data Expo with presentation titled "Should You Pay Attention to Daily Weather Forecasts? An Exploration".

The UConn Health Center has continued to support our students both from joint research grants as well as from internship programs. We thank Professor Robert Aseltine, Interim Chair, Division of Behavioral Science and Community Health and Deputy Director, Center for Public Health and Health Policy, for his continuous sponsor of research collaborations with our faculty and graduate students. We also thank Professor James Grady, Director of Biostatistics, Connecticut Institute for Clinical and Translational Science, for providing financial support and research opportunities for our graduate students. We are also enjoying close research collaboration with the Institute for Collaboration on Health, Intervention, and Policy (InCHIP). Our Statistical Consulting Services (SCS) is continuing with great success.

In the fall 2017, "Paper of Month" was initiated and organized by the department computer committee. The faculty and graduate students like this new initiative. The inaugural "Paper of the Month" was launched in November 2017. Up to now, eight papers were selected, which can be found at <https://stat.uconn.edu/paper-of-the-month/>. On May 12, 2018, a Conference on Bayesian Modeling, Computation and Applications was successfully held at UConn Storrs campus in honor of Lynn Kuo's birthday and her distinguished career. Dr. Kuo's former students and her collaborators who traveled from various places including Massachusetts, New York, Washington D. C., Cincinnati, Illinois, Nebraska, Texas, California, and South Korea, to attend this conference. With strong support from the Boehringer Ingelheim (BI) and co-sponsored by Biogen MA Inc., DBS/CDRH FDA, and Harvard Medical School, a 3-week UConn Statistics Biopharmaceutical Summer academy was held August 6 -24, 2018. 27 students including 7 undergraduate students attended this summer academy and 8 faculty members from the department also participated in this academy. Visit <http://merlot.stat.uconn.edu/BI-UConn/index.html> for more information, activities and photos. This year, our Department renewed the wonderful tradition of the Pfizer Colloquium - Distinguished Statisticians Series, which ran from 1978 until 2012 and included the likes of C. R. Rao, Bradley Efron, D.R. Cox, and many more. This year's speaker was Prof. Grace Wahba from the University of Wisconsin-Madison. The colloquium took place on September 26, 2018 at UConn Storrs campus and the interview conducted by Hao Helen Zhang from the

University of Arizona and Yoonkyung Lee from Ohio State University was filmed on Thursday, September 27, 2018. I would like to thank the local organizing committee led by Haim Bar for having done such a wonderful job.

Look ahead to 2019. The Department will host the 3rd OncoStat Annual Symposium, April 25-27, 2019 (<https://events.stat.uconn.edu/oncostat/>) and the 33rd New England Statistics Symposium, May 16-18, 2019 (<https://symposium-dev.nestat.org/>).

On behalf of the Department of Statistics, I warmly welcome all our alumni to come back to Storrs to have a visit to the Department and to meet our faculty and students. I would also like to thank our alumni for your continuous support!

Ming-Hui Chen (ming-hui.chen@uconn.edu)

From the Director of the Graduate Program



Our department has three graduate programs: the Ph.D. program, the M.S. program in Statistics, and the Professional M.S. program in biostatistics. These programs provide excellent learning and research experiences to prepare students for a successful career in statistics. We offer a broad spectrum of modern courses in statistics and probability, covering advanced theories and methodologies, statistical computing, data science, and consulting. In advanced seminar courses, students are exposed to exciting areas of current research. Through our Statistical Consulting Services, students are engaged in research in many areas of science and technology, and provide support to the research community of the University of Connecticut. We have an extensive collaboration with faculty members in educational, medical, biological, health and environmental sciences, and our graduate students have the opportunity to be employed as research assistants on many of their funded research projects. During the 2018-19 academic year, over 60 new students were enrolled in our graduate programs, 15 of them with support in the form of teaching or research assistantship from the department or a variety of other sources. We gratefully acknowledge the financial support from Dean's Office of the College of Liberal Arts and Sciences (CLAS), Dean's Office of the College of Agriculture, Health and Natural Resources (CAHNR), Office of the Vice President for Research, Pfizer, Inc. Our graduate programs are highly competitive and visible around the world. This year over 500 students all over the world applied for admission to the programs. I would like to thank the members of the graduate admissions committee, Professors Harel (Director of Graduate Admissions), Ming-Hui Chen (Department Head) for their hard work in reviewing the applications. Thanks are also due to our administrative staff, Anthony Luis and Tracy Burke, for their hard work throughout the application and admission processes. This Fall 2018 semester, we welcomed over 60 new students, 32 in the M.S. program in Statistics, 41 in the Professional M.S. program in Biostatistics, and 23 in the Ph.D. program, with 15 of the new Ph.D. students being supported by the department.

For more information about our graduate programs, including course offerings, research and other academic activities, news updates, and admissions, please go to the department website: www.stat.uconn.edu.

Zhiyi Chi (zhiyi.chi@uconn.edu)

From the Director of the Undergraduate Program



Let me start by congratulating all of our recent graduates for obtaining their Bachelor's degrees and wishing them success in all of their future endeavors!

The Undergraduate Program continues to grow and flourish. We now offer a major in Statistics, a major in Mathematics-Statistics, an Individualized major in Data Science, and a Minor in Statistics. All our course offerings remain in high demand with near-full enrollments. We now offer multiple sections of many core classes, where we previously only offered one or two. Our summer session offerings of STAT 2215 and STAT 3025 also attract many undergraduate students and allow them to complete their degrees on time. We continue to connect students with undergraduate research opportunities, internships, and other resources. The UConn Early College Experience (ECE) Program continues to grow. Please visit the department website at www.stat.uconn.edu for the undergraduate brochure, information about our undergraduate program, and information for prospective majors and minors.

This will be my last message as the Undergraduate Program Director in the department. I will be stepping down after Spring 2019 after serving in this role for more than two decades years. I wish Elizabeth Schifano the best as she takes over as Undergraduate Director from next Fall. I also thank everyone who has made serving in this position an enjoyable experience for me. Interacting with motivated students has always been a pleasure and joy, of course.

I congratulate all the graduates this year and wish them well in their future careers, either as they head out to graduate programs around the country, or accept jobs in industry.

Nalini Ravshanker (nalini.ravishanker@uconn.edu)



	<h1>Haim Bar</h1> <h2>Assistant Professor</h2>	
--	--	--

	<h3>Editorial Boards</h3>	
--	---------------------------	--

Sankhya, the Indian Journal of Statistics. Associate Editor.

	<h3>Selected Invited Talks</h3>	
--	---------------------------------	--

- A Mixture Model to Detect Edges in Sparse Co-expression Graphs.
- The 3rd Eastern Asia Meeting on Bayesian Statistics, Seoul, South Korea. July, 2018.
 - Yonsei University, Seoul, South Korea. July, 2018.
 - Korea University, Seoul, South Korea. July, 2018.
 - Bayesian Modeling, Computation, and Applications, Storrs, CT, May 2018.

	<h3>Grants</h3>	
--	-----------------	--

1. NSF Award #: 1612625. PI. Variable Selection in the High Dimensional, Low Sample Size Setting Beyond the Linear Regression and Normal Errors Model. Funding period: 8/15/16-7/31/19. Funding amount \$150,000.
2. National Science Center Poland. Identification of transcriptomic markers of maize resistance to cereal aphids. PI Dr. Hubert Sytykieticz. Funding period: 2/9/17-2/8/20.
3. Travelers. Modeling and analysis of large insurance claim and occurrence data: A partnership between UConn and Travelers. PI: Dr. Dipak Dey, co-PIs: Haim Bar, Kun Chen, Victor Hugo Lachos Davilla. Funding period: 8/1/18-7/31/19.

	<h2>Outreach</h2>	
--	-------------------	--

1. Delivered a short course on “Advanced topics in R Machine Learning” to researchers in academia and industry at the Technion, Haifa, Israel. July, 2018.
2. Organized the 24th Pfizer/ASA/UConn Distinguished Statistician Colloquium Series. Storrs, CT, September, 2018.
3. Contributed to the department’s Paper of the Month section on our website.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Bar, H.; Liu, K. Empirical Bayes Methods in Variable Selection. To appear in *WIREs Computational Statistics (WICS)*.
2. Bar, H.; Booth, J.; Wells, M. T.; Liu, K. Facilitating High Dimensional Transparent Classification Via Empirical Bayes Variable Selection. 2018. Applied Stochastic Models in Business and Industry. <https://doi.org/10.1002/asmb.2393>
3. Fox, E. L.; Pelto, G. H.; Bar, H.; Rasmussen, K. M.; Young, S. L.; Debrosse, M. G.; Rouzier, V. A.; Pape, J. W.; Pelletier, D. L. Capturing changes in HIV-infected, breastfeeding mothers` cognitive processes from before delivery to five months postpartum: An application of the pile sorting technique in Haiti. 2018. Current Developments in Nutrition; Volume 2, Issue 6, 1 June 2018, nzy017, <https://doi.org/10.1093/cdn/nzy017>. *Editor's Choice*.
4. Chen, K., Mishra, N., Smyth, J., Bar, H., Schifano, E., Kuo, L., Chen, M.-H. A tailored multivariate mixture model for detecting proteins of concordant change in the pathogenesis of Necrotic Enteritis. 2018. Journal of the American Statistical Association. <http://dx.doi.org/10.1080/01621459.2017.1356314>
5. Bar, H. Missing Data - Mechanisms and Possible Solutions. 2017. Cultura y Educacion / Culture and Education, 29(3), pages 492-525.



	<h1>Kun Chen</h1> <p>Associate Professor</p>	
--	--	--

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Associate Editor of *Sankhya*, the Indian Journal of Statistics, January 2016 - Present

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

Kun Chen was invited to give colloquium talks at Department of Mathematics and Statistics, Boston University, Boston, MA in Oct 2017, Weill Cornell Medical College, New York in November 2017, IBM Watson Research Center, New York in November 2017, School of Statistics, Renmin University of China, Beijing, China in December 2017, School of Statistics, Beijing Normal University, Beijing, China in December 2017, and Department of Statistics and Computer Information Systems, Baruch College, New York in April 2018. He gave invited talks at Modern Modeling Methods Conference, Storrs, CT in May 2018, ICSA Applied Statistics Symposium, New Brunswick, New Jersey in June 2018, the 8th International Forum on Statistics, Renmin University of China, Beijing, China in July 2018, and ICSA China Conference, Qingdao, China in July 2018. Chen also gave a topic contributed talk at the Joint Statistical Meeting, Vancouver, Canada in August 2018.

	<h2>Grants</h2>	
--	-----------------	--

1. Collaborative Research: Comprehensive heterogeneous response regression from complex data. National Science Foundation (1718798). Principal Investigator; \$250,000; 09/01/2017–08/31/2020. Active.
2. Improving the identification of patients at risk of suicide. National Institutes of Health (R01-MH112148). Principal Investigator on sub-award; \$432,886; 07/01/2017–06/30/2020. Active.
3. Integrative multivariate analysis with multi-view data. National Science Foundation (DMS-1613295). Principal Investigator; \$150,000; 09/01/2016–08/31/2019. Active.

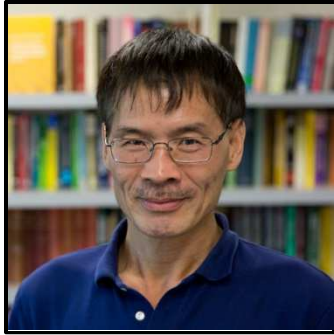
4. Data Science Lab: Real-world data science problems meet future data scientists. UConn CLAS Fund for Innovative Education in Science. Co-Principal Investigator (with Elizabeth Schifano and Jun Yan); \$65,000; 01/01/2017–12/31/2018. Active.
5. Modeling and analysis of large insurance claim and occurrence data: a partnership between UConn & Travelers. Travelers Insurance. Co-Principal Investigator (with Haim Bar, Elizabeth Schifano, Xiaojing Wang and Dipak Dey); \$467,626; 08/01/2016–07/31/2019. Active.
6. An integrative statistics-guided image-based multi-scale lung model. U.S. National Institutes of Health (U01-HL114494). Principal Investigator on sub-award; \$173,521; 08/01/2013–05/31/2018. Completed.

	<h2>Outreach</h2>	
--	-------------------	--

Kun Chen serves as the Secretary of the New England Statistical Society, a member of the Connecticut All-Payer Claims Database (APCD) Data Release Committee. At UConn, Kun serves as a member of the University General Education Oversight Committee and a co-chair of its Q-Subcommittee.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Liang, J., Chen, K., Lin, M., Zhang, C., and Wang, F. (2018) Robust finite mixture regression for heterogeneous targets. *Data Mining and Knowledge Discovery*, 32(6), 1509–1560.
2. Luo, C., Liang, J., Li, G., Wang, F., Dey, D., and Chen, K. (2018) Leveraging mixed-type and incomplete outcomes via a generalized reduced rank regression. *Journal of Multivariate Analysis*, 167:378–394.
3. Chen, K., Mishra, N., Smyth, J., Bar, H., Schifano, E., Kuo, L., and Chen, M.-H. (2018) A tailored multivariate mixture model for detecting proteins of concordant change in the pathogenesis of Necrotic Enteritis. *Journal of the American Statistical Association*, 113:546–559.
4. Doshi, R., Aseltine, R., Wang, F., Schwartz, F., Rogers, F., and Chen, K. (2018) Illustrating the role of health information exchange in a learning health system: Improving the identification and management of suicide risk. *Connecticut Medicine*, 82 (6), 327-333.



	<h1>Ming-Hui Chen</h1> <h2>Department Head</h2>	
--	---	--

	<h2>Professional Societies</h2>	
--	---------------------------------	--

Ming-Hui Chen was elected to Fellow of International Society for Bayesian Analysis in 2016, the Institute of Mathematical Statistics in 2007 and Fellow of American Statistical Association in 2005. He is an elected member of the International Statistical Institute. He is a member of the American Association for the Advancement of Science (AAAS), the Institute of Mathematical Statistics, American Statistical Association, The International Biometric Society (ENAR), the International Society for Bayesian Analysis, Section on Bayesian Statistics, International Chinese Statisticians Association, Korean International Statistical Society, and New England Statistical Society. He is also an ASA accredited Professional Statistician (PStat).

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Ming-Hui Chen is Editor of Bayesian Analysis, Co Editor-in-Chief of Statistics and Its Interface, Associate Editor of Journal of the American Statistical Association, Associate Editor of Lifetime Data Analysis, and Associate Editor of Journal of Computational and Graphical Statistics.

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

Ming-Hui Chen delivered a keynote talk on “Statistical Methods for Stream Data” at Big Data Methodology Workshop, The Great Plains IDeA-CTR, University of Nebraska Medical Center, Omaha, NE, May 18, 2018. He also gave a Short Course (5 full days) on “Applied Bayesian Statistics”, Co-Presented with his former PhD student, Jing Wu, at the 2018 Statistics Summer School, School of Mathematics and Statistics, Northeast Normal University, Changchun, China, July 16-July 20, 2018.

He gave invited talks on “Recent Innovation and Development in Joint Models for Longitudinal and Time-to-Event Data: An Overview” in an invited Session 3b on “Mechanistic joint models for longitudinal and time-to-event data: recent advances and specific applications in oncology drug development”, ACoP8, Marriott Resort: Harbor Beach Hotel, Fort Lauderdale, Florida, October 15-18, 2017; “Network Meta-Regression for Ordinal Outcomes: Applications in Comparing Crohn's Disease Treatments” in an invited

Session 18 on “Recent Innovation in Network Meta-Analysis”, ENAR 2018 Spring Meeting, Atlanta, GA, March 25-28, 2018; “Recent Innovation and Development in Joint Models for Longitudinal and Survival Data” in the Second Annual Boston Pharmaceutical Symposium, Boston Chapter of the American Statistical Association, Takeda Pharmaceuticals, Cambridge, MA, May 4, 2018; “Bayesian Network Meta-Analysis with Applications to Cholesterol-Lowering Drugs” in the Contributed Member Session entitled “Bayesian models and applications in East Asia”, 2018 ISBA World Meeting, Edinburgh, UK, June 24-29, 2018; “Bayesian Network Meta-Regression Hierarchical

Models Using Heavy-Tailed Multivariate Random Effects with Covariate-Dependent Variances” in an invited session entitled “Latest Bayesian applications in clinical trials”, The 3rd EAC-ISBA Meeting, Seoul National University, Seoul, Korea, July 12-13, 2018; and “Bayesian Network Meta-Regression Models Using Heavy-Tailed Multivariate Random Effects with Covariate-Dependent Variances” in the Topic Contributed Paper Session #654 on “Recent Innovation in Generalized Evidence Synthesis”, 2018 JSM in Vancouver, British Columbia, August 2, 2018.

He also delivered invited talks on “Bayesian Item Response Theory Models with Flexible Generalized Logit Links” at School of Mathematics and Statistics, Northeast Normal University, Changchun, China, December 25, 2017; and “A Bayesian Cure Rate Frailty Model for Survival Data in the Presence of Semi-Competing and Competing Risks” at School of Mathematical Sciences, Shanghai Jiao Tong University, Shanghai, China, December 28, 2017;

	<h2 style="margin: 0;">Grants</h2>	
--	------------------------------------	--

Ming-Hui Chen is a Co-PI of NIH R01 grant on “Bayesian Approaches to Model Selection for Survival Data” for 2016-2021; NIH P01 grant on “Statistical Methods for Cancer Clinical Trials” for 2015-2020; NIH R01NR grant on “Multi-Omics Analysis of Pain/Stress Impact on Neurodevelopment in Preterm Infants” for 2017-2021; and NIH R01 grant on “Metabolomics Tools for Biomedicine” for 2015-2019. He is a Co-PI on an NSF grant on “Estimating the Bayesian Phylogenetic Information Content of Systematic Data” for 2014-2019, an American Cancer Society grant on “Activatable Nanoparticles for Radiotherapy of Metastatic Ovarian Cancer” for 2015-2019, and a State of Florida Dept of Citrus, OJ Project RFP#17-01 on “Longitudinal Study Assessing Impact of 100% Orange Juice Intake on Anthropometric and Cardiometabolic Indicators and Health-Related Behaviors in U.S. Children” for 2018-2020. He is a Co-PI (PI: George Bollas) of the UConn Provost Academic Plan grant on “Bayesian Design of Tests for Fault Detection and Isolation in Complex Systems” for 2016-2019 and a Co-PI (PI: Xiuling Lu) of another UConn Provost Academic Plan grant on “Polymer-Based Nanocarrier Platform for Improving Efficacy and Safety of Potent Chemotherapeutic Agents” for 2015-2018. He is the PI on the subcontract from UNC of Amgen grant on “Bayesian Methods for Meta-analysis”, 1/1/2014-12/31/2018 and Merck & Co grant on “Bayesian Methods for Design and Analysis of Clinical Trials” for 2015-2019.

	<h2>Outreach</h2>	
--	-------------------	--

Ming-Hui Chen was an external reviewer of the grant proposals of the Research Grant Council (RGC) of Hong Kong (2013 – 2018). He was also an external reviewer of the proposal of TOP Grants for young researchers, Netherlands Organisation for Scientific Research (NWO), in 2018. He serves on the International Advisory Committee for the discipline of statistics of Yunnan University, December 2017 -- Present. He also serves as a member of the International Advisory Committee for the discipline of statistics of Shanghai Jiaotong University, 2013 -- present. He serves as Chair of the 2018 Mitchell Prize Committee and he was a member of the 2017 Mitchell Prize Committee, International Society for Bayesian Analysis. He is Chair of the Eastern Asia Chapter of International Society for Bayesian Analysis for 2018-2019 and President of the New England Statistical Society for June 1, 2018 - May 31, 2020.

	<h2>Research Corner</h2>	
--	--------------------------	--

Research Interests:

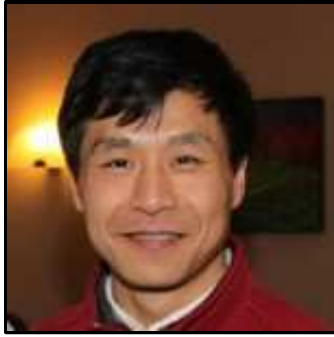
Bayesian Statistical Methodology, Bayesian Computation, Bayesian Phylogenetics, Categorical Data Analysis, Design of Bayesian Clinical Trials, DNA Microarray Data Analysis, Meta-analysis, Missing Data Analysis (EM, MCEM, and Bayesian), Monte Carlo Methodology, Prior Elicitation, Statistical Methodology and Analysis for Prostate Cancer Data, Statistical Modeling, Survival Data Analysis, and Variable Selection.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Ming-Hui Chen (with Li, H., Ibrahim, J.G., Kim, S., Shah, A.K., Lin, J., and Tershakovec, A.M.) 2018+. Bayesian Inference for Network Meta-Regression Using Multivariate Random Effects with Applications to Cholesterol Lowering Drugs. *Biostatistics*. In press. doi:10.1093/biostatistics/kxy014.
2. (with Wu, J., Ibrahim, J.G., Schifano, E.D., and Fisher, J.D.) 2018. Bayesian Modeling and Inference for Nonignorably Missing Longitudinal Binary Response Data with Applications to HIV Prevention Trials. *Statistica Sinica*, 28, 1929-1963.
3. (With Li, W., Wang, X., and Dey, D.K.) 2018. Bayesian Design of Non-Inferiority Clinical Trials via the Bayes Factor. *Statistics in Biosciences*, 10, 439-459.
4. (With Tilki, D., Wu, J., Huland, H., Graefen, M., Braccioforte, M., Moran, B., and D'Amico, A.V.) 2018+. Surgery versus Radiation in the Management of Gleason Score 9,10 Prostate Cancer and the Risk of Death. *JAMA Oncology*. In press. doi: 10.1001/jamaoncol.2018.4836.

	<h2>Published Books</h2>	
--	--------------------------	--

1. Ming-Hui Chen (With J.D. Petrucci and B. Nandram) 1999. Applied Statistics for Engineers. Text Book, Prentice-Hall, INC., ISBN 0-13-565953-1.
2. (With Q.-M. Shao and J.G. Ibrahim) 2000. Monte Carlo Methods in Bayesian Computation. Springer-Verlag, ISBN 0-387-98935-8.
3. (With J.G. Ibrahim and D. Sinha) 2001. Bayesian Survival Analysis. Springer-Verlag, ISBN 0-387-95277-2.
4. (With D.K. Dey, P. Müller, D. Sun, and K. Ye) 2010. Frontiers of Statistical Decision Making and Bayesian Analysis --- In Honor of James O. Berger. Springer-Verlag. ISBN 978-1-4419-6943-9.
5. (With L. Kuo and P.O. Lewis) 2014. Bayesian Phylogenetics: Methods, Algorithms, and Applications. Chapman & Hall/CRC Mathematical and Computational Biology. ISBN: 978-1466500792.



	<p style="text-align: center;">Zhiyi Chi Professor, Associate Head, Director of Graduate Program</p>	
--	---	--

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Associate Editor for *Applied Stochastic Models in Business and Industry*.

	<h2>Grants</h2>	
--	-----------------	--

NSF DMS-1720218. "New simulation methods for Lévy processes and related distributions. 2017–2020.

	<h2>Outreach</h2>	
--	-------------------	--

Member of the Scientific Program Committee and Session Organizer for the 8th International Workshop in Applied Probability – IWAP 2016, Toronto, Canada, June 20-23, 2016.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

Z. Chi (2018). On a multivariate strong renewal theorem. *J. Theor. Probab.* 31, 1235–1272.

Z. Chi (2016). Random reversible Markov matrices with tunable extremal



	<h1>Dipak Dey</h1> <h2>Distinguished Professor</h2>	
--	---	--

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Editor-in-chief, *Sankhya*, series A and Series B, *The Indian Journal of Statistics*, published through Springer.

	<h2>Grants</h2>	
--	-----------------	--

1. Modeling and Analysis of Large Insurance Claim and Occurrence Data: A Partnership Between UConn and Travelers. August 28, 2016- 2018, \$460,000.
2. Dipak Dey, SCHOLARSHIP FACILITATION FUND AWARDS SPRING 2017, OFFICE OF THE VICE PRESIDENT FOR RESEARCH, UCONN. (Joint with Yuping Zhang, PI, Statistics and Dipak Dey, Co-PI, Statistics)Statistical Learning Methods for Massive Multivariate Data

	<h2>Outreach</h2>	
--	-------------------	--

1. Member, Connecticut Institute of Clinical and Translational Sciences (CICATS).
2. Member, Core Research Group of the Center for Health Communication and Marketing.
3. Member, Advisory Committee of the Center for Environmental Sciences and Engineering (CESE).
4. Member, Institute for Collaboration on Health Intervention and Policy (In CHIP).
5. Member of the Hong Kong Research Grant Council, United Arab Emirates and Kuwait Research Foundation.
6. Referee on the statistical parts of "Nature".
7. Board of Trustees, International Indian Statistical Association.

	<h2 style="margin: 0;">Selected Invited Talks</h2>	
--	--	--

1. Invited Speaker, International Conference in Statistics and Probability on 125th Birth Anniversary of P.C. Mahalanobis, Indian Statistical Institute, Kolkata, India, January 2018.
2. Invited Speaker, Department of Statistics, Purdue University, West Lafayette, IN., April, 2018.
3. Invited Speaker, Bayesian Modeling, Computation and Applications: A Conference in Honor of Professor Lynn Kuo, University of Connecticut, Storrs, CT, May, 2018.
3. Invited Speaker, The Institute for Integrating Statistics in Decisions Sciences, The George Washington University, Washington DC., May 2018.
4. Invited Speaker, 4th Conference of International Society for Nonparametric Statistics, Salerno, Italy, June, 2018.
5. Invited Speaker, International Workshop on Applied Probability, Budapest, Hungary. June, 2018
6. Invited Panelist , "What Should Be the Role of Collaboration/Consulting for Applied Statistical Faculty Members in Academia: Rewards and Punishments ?" at the Joint Statistical Meetings, Vancouver, Canada, July, 2018.
7. Invited Speaker, UConn Statistics Summer Academy, Storrs, CT, August, 2018.
8. Plenary Speaker, 2nd International Conference in Stochastic Process and Uncertainty Phenomenon, Lima, Peru, October, 2018.

	<h2 style="margin: 0;">Selected Publications</h2>	
--	---	--

1. K. Bharath, P. Kambadur, D. Dey, Rao, A. and B. Baladandyuthapani. Statistical Tests for Large Tree-structured Data. Journal of the American Statistical Association. <http://dx.doi.org/10.1080/01621459.2016.1240081>. (2017).
2. G. Goh and D. Dey. Asymptotic Properties of Marginal Least Squares Estimator for Ultrahigh-Dimensional Linear Regression Models with Correlated Errors. The American Statistician, <http://dx.doi.org/10.1080/00031305.2017.1302359>. (2018).
3. R. Caron, D. Sinha, D. K. Dey and A. Polpo. Categorical data analysis using a skewed Weibull regression model. Entropy. [doi.org?10.3390/e200030176](http://dx.doi.org/10.3390/e200030176). (2018).
4. C. Larose, D. K. Dey and O. Harel. The Impact of Missing Values on Different Measures of Uncertainty. Statistica Sinica. 10.5705/ss.202016.0073. (2018).

	<h2 style="margin: 0;">Published Books</h2>	
--	---	--

1. (With M.-H. Chen, P. Müller, D. Sun, and K. Ye) 2010. Frontiers of Statistical Decision Making and Bayesian Analysis
2. Analysis --- In Honor of James O. Berger. Springer-Verlag. ISBN 978-1-4419-6943-9.
3. Current Trends in Bayesian Methodology with Applications, Eds. D. K. Dey, S.K. Upadhyay, U. Singh and A. Loganathan, eds. Chapman & Hall/CRC Press, 27, 2015. . ISBN # 13:978-1-4822-
4. Extreme Value Modeling and Risk Analysis: Methods and Applications, Eds. D.K Dey and J. Yan. Chapman & Hall/CRC Press, 2016. ISBN # 13:978



Joseph Glaz

Professor

Editorial Boards

Editor - in - Chief, Methodology and Computing in Applied Probability, since 1997, and Associate Editor, Sequential Analysis, since 2004.

Selected Invited Talks

Invited lecture at the International Workshop in Applied Probability 2018, Eötvös Loránd University, June 17-21, Budapest, Hungary

Outreach

Joseph Glaz is a member of the Board of International Workshops in Applied Probability (IWAP). IWAP 2018 was held on June 18-21, 2018, in Budapest, Hungary. He is a member of the Scientific Program Committee of the International Symposia on Applied Stochastic Models and Data Analysis, ASMDA. ASMDA 2017 was held in London, UK, in June 2017. ASMDA 2019 will take place in Florence, Italy, on June 11-14, 2019. He is a member of the oversight committee for an undergraduate minor in bioinformatics. He is also affiliated with Booth Engineering Center for Advanced Technology (BECATS).

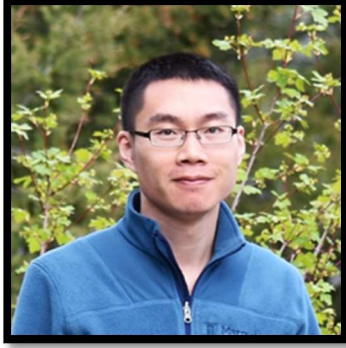
Selected Publications

1. Zhao, B. and Glaz, J. (2017). Scan statistics for detecting a local change in variance for two dimensional normal data. Communications in Statistics-Theory and Methods Ser. A., Vol. 46, No. 11, 557-5530.
2. Chen, J. and Glaz, J. (2017). Scan statistics for discrete iid random variables: conditional case. Handbook of Scan Statistics. Glaz, J. and Koutras, M. V., Eds., Springer. Springer Link, https://doi.org/10.1007/978-1-4614-8414-1_22-1

3. Zhang, P. and Glaz, J. (2017). Scan Statistics on graphs and networks. Handbook of Scan Statistics. Glaz, J. and Koutras, M. V., Eds, Springer. Springer Link, https://doi.org/10.1007/978-1-4614-8414-1_43-1
4. Wu, Q. and Glaz, J. (2018). Robust scan statistics for detecting a local change in population mean for normal data. Methodology and Computing in Applied Probability. <https://doi.org/10.1007/s11009-018-9668-6>

	<h2>Published Books</h2>	
--	--------------------------	--

1. Glaz, J. and Balakrishnan, N. (Eds.) (1999). Recent Advances on Scan Statistics. Birkhauser Publishers, Boston.
2. Glaz, J., Naus, J., Wallenstein, S. (2001). Scan Statistics. Springer, New York.
3. Baeza-Yates, R., Glaz, J., Gzyl, J., Hüsler, J. and Palacios, J. L. (Eds.) (2005).
 - i. Recent Advances in Applied Probability. Springer, New York.
4. Chiquet, J., Glaz, J., Limnios, N. and Moyal, P. (Eds.) (2008). Book of Abstracts. IWAP 2008, 4th International Workshop in Applied Probability, Université de Technologie de Compiègne, Compiègne, France.
5. Glaz, J., Pozdnyakov, V. and Wallenstein, S. (Eds.) (2009). Scan Statistics: Methods and Applications. Birkhauser, Boston.
6. Aribas, A., Glaz, J., Jiménez, R. and Romo, J. (2010). IWAP 2010 Book of Abstracts and Detailed Programme. 5th International Workshop in Applied Probability.
7. Universidad Carlos III de Madrid, Colmenarejo, Madrid, Spain. Depósito Legal: M-28524-2010.
8. Glaz, J. and Koutras, M. V. (Eds.) (2018). Handbook of Scan Statistics. Springer Nature (in preparation).



	<p>Yuwen Gu Assistant Professor</p>	
--	--	--

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

International Conference on Statistics and Optimization, Beijing Jiaotong University, China, 2018
The ICSA Applied Statistical Symposium, Rutgers University, New Brunswick, NJ, 2018
The 2018 IISA International Conference on Statistics, University of Florida, Gainesville, FL, 2018
New England Statistics Symposium, University of Massachusetts, Amherst, MA, 2018
Department of Mathematics and Statistics, McGill University, Montreal, Quebec, Canada, 2018

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Gu, Y. & Zou, H. (2018). Aggregated expectile regression by exponential weighting. *Statistica Sinica*, In Press.
2. Gu, Y., Fan, J., Kong, L., Ma, S. & Zou, H. (2018). ADMM for high-dimensional sparse penalized quantile regression. *Technometrics*, 60(3), 319-331.
3. Gu, Y. & Zou, H. (2016). High-dimensional generalizations of asymmetric least squares regression and their applications. *The Annals of Statistics*, 44(6), 2661-2694.



	<h1>Ofer Harel</h1> <p>Professor</p>	
--	--------------------------------------	--

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Ofer Harel is an Associate Editor for Statistics in Medicine and Sankhya, the Indian Journal of Statistics, Series B. He is also on the Editorial Board of The Open Medical Informatics Journal and AIDS and Behavior

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

Presented invited talks at the Undergraduate Research Experience in Statistics, Oregon State University, Corvallis, OR (August, 2018); Department of Medical Statistics, London School of Hygiene and Tropical Medicine (July, 2018); University of Glasgow School of Mathematics & Statistics, Glasgow, UK (June, 2018); the 12th International Conference for Health Policy Statistics (ICHPS), Charelston, SC (January, 2018); Mount Holyoke College, South Hadley, MA (November, 2017); Amherst College, Amherst, MA (October, 2017).

	<h2>Grants</h2>	
--	-----------------	--

Ofer Harel is a PI on “Collaborative Research: Statistical Analysis of Partially Observed Shapes in Two Dimensions,” supported by National Science Foundation; he is a co-PI on “Single Cell Lineage Map (SCLM)” supported by the University of Connecticut; a subcontract PI on “State Innovation Model/Round Two of Funding for Design and Test Assistance,” supported by Center for Medicare & Medicaid Services via grant awarded to the State of Connecticut Office of Healthcare advocate; he is a PI together with Marie Smith (Pharmacy) on “Pharmacist E-Consult Service for Primary Care Medication Use and Safety (PCMUST): An Implementation Science Pilot Project,” supported by Research Excellence Program (REP), Office of Vice President for Research (UConn); and Co-I on “Multilevel Resilience Trajectories in the Transition to Cancer Survivorship, supported by National Institute of Health. Ofer Harel also has several sub-contracts from UCHC to fund number of graduate students.

	<h1>Outreach</h1>	
--	-------------------	--

Elected to co-chair the International Conference for Health Policy Statistics (ICHPS), 2020; Elected to teach five short courses related to missing data as part of the Council of Chapters traveling courses series; Member, Biostatistical Methods and Research Design (BMRD) Study Section, Center For Scientific Review, National Institute of Health; Member, Data and Safety Monitoring Board (DSMB) for NCCIH grant “Mobile mindfulness to improve psychological distress after critical illness;” Member, Data and Safety Monitoring Board (DSMB) for NIDA grant “Behavioral intervention to enhance HIV test/treat;” Member of the Program Committee for the 2018 meeting of the Eastern North American Region (ENAR) of the International Biometric Society (IBS) meeting; Member of the scientific organizing committee for the International Conference for Health Policy Statistics (ICHPS), 2018; Mentor, Diversity Mentoring Program, Joint Statistical Meeting, Baltimore, MD; Mentor, Math Alliance.

	<h1>Selected Publications</h1>	
--	--------------------------------	--

1. Harel, O., Mitchell, E. and the missing data group. (2018) “Multiple imputation for incomplete data in epidemiological studies.” *American Journal of Epidemiology*, 187(3), 576–584.
2. McGinniss, J. and Harel, O. (2016) “Multiple imputation in three or more stages.” *Journal of Statistical Planning and Inference*, 176, 33–51. doi:10.1016/j.jspi.2016.04.001.
3. Harel, O. and Nazzaro V. (2016) “Re-thinking data collection for HIV prevention trials.” *Journal of Acquired Immune Deficiency Syndromes*, 72(4), 462–464.
4. Thomas, N., Harel, O. and Little, R.J.A. (2016) “Analyzing clinical trial outcomes based on incomplete daily diary reports.” *Statistics in Medicine*, 35(17), 2894–2906. doi: 10.1002/sim.6890.

	<h1>Published Books</h1>	
--	--------------------------	--

Harel, O. (2009). *Strategies for data analysis with two types of missing values: From theory to application*. Saarbrücken, Germany: Lambert Academic Publishing.



	<h1>Lynn Kuo</h1> <p>Professor</p>	
--	------------------------------------	--

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

1. Invited talks: “Adaptive Partition Weighted Approach for Estimating Marginal Posterior Density with Applications” ICSA 2018 Applied Statistics Symposium, New Brunswick, NJ.
2. “Nonparametric Bayesian Biclustering for Longitudinal High-dimensional Data”, 2018 ICSA China Conference, Qingdao, China.

	<h2>Grants</h2>	
--	-----------------	--

1. She is PI of a subaward of “Disparities in Breast Cancer: Is Elevated Serum sLag-3 Predictor of More Aggressive Disease in African-American Women with Breast Cancer?” (PI, H. Smilowitz-PI) supported by Connecticut Breast Health Initiative 2015-2017.
2. She is a Co-PI of an NSF grant “Estimating the Bayesian Phylogenetic Information Content of Systematic Data” with Paul Lewis (PI), 2014-2019.

	<h2>Outreach</h2>	
--	-------------------	--

1. She is a Treasurer of New England Statistical Society, Inc.
2. She has been the faculty advisor for the UConn Taiwanese Student Association.
3. She has been a reviewer for Statistics in Medicine, Systematic Biology, PLOS One, a book for Springer, and 2018 Research Excellence Program (Physics/Math/Stats) at UCONN.
4. She has also served as an external reviewer for a candidate to be considered for promotion to Associate Professor at Weill Cornell Medical College, Cornell University.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Y.-B. Wang, M.-H. Chen, L. Kuo, and P. Lewis. A New Monte Carlo Method for Estimating Marginal Likelihoods. *Bayesian Analysis*, 2018, 13.2, 311-333.

2. C.K. Then, N.F. Chi, K.H. Chung, L. Kuo, K.H. Liu, C. –J. Hu, S. C. Shen, Y.K. Lin. Risk analysis of use of different classes of antidepressants on subsequent dementia: A nationwide cohort study in Taiwan. *PLoS ONE*. 2017, 12(4): e0175187. [https://doi.org/ 10.1371/journal.pone.0175187](https://doi.org/10.1371/journal.pone.0175187), 1-17.

3. K. Chen, N. Mishra, J. Smyth, H. Bar, E. Schifano, L. Kuo, M.H. Chen (2018) A Tailored Multivariate Mixture Model for Detecting Proteins of Concordant Change Among Virulent Strains of *Clostridium Perfringens*, *Journal of American Statistical Association*, 113(522):546-559.

4. D. Shi, and L. Kuo (2018) Variable Selection for Bayesian Survival Models Using Bregman Divergence Measure, *Probability in the Engineering and Informational Sciences*. (published online: June 22, 2018) doi:10.1017/S0269964818000190

	<h2>Published Books</h2>	
--	--------------------------	--

Chen, M.-H., Kuo, L., & Lewis, P. (Eds.) (2014). *Bayesian phylogenetics: Methods, algorithms, and applications*. New York, NY: Chapman & Hall (CRC).



	<p style="text-align: center;">Victor Hugo Lachos Davila Professor</p>	
--	---	--

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Associate Editor of *Sankhya*, the Indian Journal of Statistics, January 2016 - Present

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

Invited talk at Flexible Statistical Models For a Skewed World of Data (Skew Workshop 2017), Santiago, Chile, September 2017. Invited talk at The 10th International Conference of the ERCIM WG on COMPUTING & STATISTICS (ERCIM-2017), London, United Kingdom, December 2017. Invited talk at the Modern Modeling Methods Conference (MMM), University of Connecticut, May 2018. Invited talk at The 2nd International Conference on Econometrics and Statistics (EcoSta 2018), Hong Kong, June 2018. Invited colloquium lecture at The Department of Mathematics, Universidad del Quindío, Armenia-Colombia, May, 2018. Invited colloquium lecture at The Department of Statistic, National University of Colombia, Bogota-Colombia, May, 2018. Invited colloquium lecture at The Department of Biostatistics, Virginia Commonwealth University, Richmond-VA, April, 2018. Invited colloquium lecture at The Department of Statistic, Pontificia Universidad Católica de Chile, Santiago -Chile, July, 2018.

	<h2>Outreach</h2>	
--	-------------------	--

Member of the Scientific Program Committee for the 4th Workshop in Survival Analysis and Applications – WASA 2018, Bahia, Brazil, March, 2018. Member of the Scientific Program Committee for the Brazilian Meeting of Bayesian Statistics – EBEB 2018, Rio de Janeiro, Brazil, March, 2018. Member of the Scientific Program Committee and Session Organizer for the 3rd international conference on econometric and statistics - Ecosta 2019- National Chung Hsing University (NCHU), Taichung, Taiwan 25-27 June 2019.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Wan-Lun Wang, Lachos, V.H. and Tsung-I Lin (2018). Multivariate longitudinal data analysis with censored and intermittent missing responses. *Statistics in Medicine* , 37, 2822-2835.
2. Padilla, J.L., Azevedo, C.L. and Lachos, V.H. (2018). Multidimensional multiple group IRT models with skew normal latent trait distributions. *Journal of Multivariate Analysis*, 167, 250-268.
3. Ordoñez, J. A., Lachos, V.H., Cabral, C.R.B, and Bandyopadhyay, D. (2018). Geo-statistical estimation and prediction for censored responses. *Spatial Statistics*, 23, 109-123.
4. Schumacher, F. L., Lachos, V.H. and Dey, D.K. (2017). Censored regression models with autoregressive errors: A likelihood-based perspective. *Canadian Journal of Statistics*, 45, 375–392.



	<h2>Nitis Mukhopadhyay Professor</h2>	
--	---	--

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Nitis Mukhopadhyay has been the Editor-in-Chief of *Sequential Analysis* journal since 2004. He was a Guest Co-Editor (with Carlos A. Coelho and Thomas Mathew) of a special issue the *Journal of Statistical Theory and Practice* in honor of the 70th birthday of Professors Bimal K. Sinha and Bikas K. Sinha, March 2018, no.1, 12, pp. 1-154. He is a member of the Advisory Board for *Sri Lankan Journal of Applied Statistics* and also Associate Editors for the *Communications in Statistics* (both series) and *Calcutta Statistical Association Bulletin*.

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

Nitis Mukhopadhyay delivered a large number of major lectures including (i) plenary lecture at the 6th International Workshop in Sequential Methodologies held in Rouen, France, June 20-23, 2017; (ii) invited paper presentation at the International Sri Lankan Conference at Colombo, Sri Lanka, December 28-29, 2017; (iii) plenary lecture at the 5th African International Conference on Statistics held at the University of Botswana, March 18-23, 2018; (iv) invited paper presentation at the International Reliability Conference held in Calcutta, hosted by IAPQR, January 4-6, 2018; (v) invited paper presentation at the National Seminar, Ashutosh College, Calcutta, January 10, 2018. He also delivered an invited colloquium in the Department of Mathematics, Utah Valley University, as a visiting faculty, September 20-24, 2017.

	<h2>Grants</h2>	
--	-----------------	--

Taylor and Francis Group (publisher of Sequential Analysis journal) continues to fund the research program of Nitis Mukhopadhyay, the Editor-in-Chief, through an annual grant of since 2004.

	<h2>Outreach</h2>	
--	-------------------	--

Nitis Mukhopadhyay hosted two visiting researchers from Durgapur NIT, Fall 2017. Delivered an invited paper presentation at the National Seminar, Ashutosh College, Calcutta, January 10, 2018. Also presented an hour-long seminar in the Department of Statistics, UConn-Storrs, emphasizing the contributions of W. Hoeffding in nonparametric and large-sample inference, February 2018.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Nitis Mukhopadhyay (Jun Hu). Confidence intervals and point estimators for a normal mean under purely sequential strategies involving Gini's mean difference and mean absolute deviation, *Sequential Analysis* (2017), 36: 210-239.
2. (with Sudeep Bapat) Purely sequential bounded risk point estimation of the negative binomial means under various loss functions: Multi-sample problems, *Sequential Analysis* (2017), 36, 490-512.
3. (with Yan Zhuang) Purely sequential and two-stage bounded-length confidence interval estimation problems in Fisher's "Nile" example, *Journal of Japan Statistical Society* (2017), 47, 237-272. Zhuang).
4. (with S. Zacks) Modified Linex two-stage and purely sequential estimation of the variance in a normal distribution with illustrations using horticultural data, *Journal of Statistical Theory and Practice* (2018), 12, 111-135, in *Advances in Statistical Planning and Inference, 70th Birthday Festschrift for Professor Bimal K. Sinha and Professor Bikas K. Sinha*, edited volume, Carlos A. Coelho, Thomas Mathew, and Nitis Mukhopadhyay, eds.

	<h2>Published Books</h2>	
--	--------------------------	--

Nitis Mukhopadhyay Guest Co-Editor (with Carlos A. Coelho and Thomas Mathew) of a special issue entitled *Advances in Statistical Planning and Inference* on behalf of the *Journal of Statistical Theory and Practice* in honor of the 70th birthday of both Professors Bimal K. Sinha and Bikas K. Sinha, March 2018, no.1, 12, pp. 1-154.



	<h1>Vladimir Pozdnyakov</h1> <p>Professor</p>	
--	---	--

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Vladimir Pozdnyakov is an Associate Editor of *Journal of Mathematical Analysis and Applications*.

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

Vladimir Pozdnyakov gave the following invited talks this year: “Discretely Observed Brownian Motion Governed by a Telegraph Process: Estimation,” at the 9th International Workshop on Applied Probability, June 2017, Toronto, Canada and at the 35th Quality and Productivity Research Conference, June 2018, Storrs, CT.

	<h2>Outreach</h2>	
--	-------------------	--

Member of the Scientific Program Committee and Session Organizer for the 8th International Workshop in Applied Probability – IWAP 2017, Toronto, Canada, June 20-23, 2018.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

Pozdnyakov, V. & Steele, J. M. (2016). Buses, bullies and bijections, *Mathematics Magazine*, 89, 167-176.

Chi, Z., **Pozdnyakov, V.**, & Yan, J. (2015). On expected occupation time of Brownian bridge. *Statistics and Probability Letters*, 97, 83-87.

Yan, J., Chen, Y., Lawrence-Apfel, K., Ortega, I. M., **Pozdnyakov, V.**, Williams, S., & Meyer, T. (2014). A moving-resting process with an embedded Brownian motion for animal movements. *Population Ecology*, 56, 401-415.

Pozdnyakov, V., Meyer, T., Wang, Y., & Yan, J. (2014). On modeling animal movements using Brownian motion with measurement error. *Ecology*, 95, 247-253.



	<p style="text-align: center;">Nalini Ravishanker Professor</p>	
--	--	--

	<p style="text-align: center;">Editorial Boards</p>	
--	--	--

Co-Editor-in-Chief of the *International Statistical Review*, January 2016 - Present • Associate Editor of the *Journal of Forecasting*

	<p style="text-align: center;">Selected Invited Talks</p>	
--	--	--

Was an invited panelist at StatFest, Emory University, Atlanta (Sep. 2018) and an invited participant in NII Shonan Workshop on Analyzing Large Number of Time Series (Feb. 2018).

Invited talks at PCM 125, ISI Kolkata (Jan. 2018) on Penalized Estimating Function Approach for Analyzing Durations in Financial Data, ISBIS 2018 in Athens (July 2018) on Multiple Day Biclustering of High-frequency Financial Time Series.

	<p style="text-align: center;">Grants</p>	
--	--	--

Co-P.I. on “Are Transportation Network Companies Synergistic with Other Shared Ride Mode Offerings? An Exploratory Analysis of Demand Data from NYC Utilizing High Resolution Spatiotemporal Models”, with Karthik Konduri.

	<p style="text-align: center;">Outreach</p>	
--	--	--

President of the International Society of Business and Industrial Statistics (2017-2019). She is the Vice President for Education of the New England Statistical Society. She continues to serve as the statistics faculty coordinator for the UConn Early College Experience Program (www.ece.uconn.edu).

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Liu, H., Zou, J. and Ravishanker, N. (2018). Multiple Day Biclustering of High Frequency Financial Time Series, *STAT*, e176, 7(1), <https://doi.org/10.1002/sta4.176>
2. Holan, S. H. and Ravishanker, N. (2018). A Review of Frequency Domain Clustering, *WIREs*, DOI: 10.1002/WICS.1444.
3. Serhiyenko, V., Ravishanker, N., Venkatesan, R. (2017). Multi-stage Multivariate Modeling of Temporal Patterns in Prescription Counts for Competing Drugs in a Therapeutic Category, *Applied Stochastic Models in Business and Industry*, (discussion paper), 34(1), 61-78.
4. Zhang, Y., Zou, J., Ravishanker, N., and Thavaneswaran, A. (2018). Modeling Financial Durations using Penalized Estimating Functions, *Computational Statistics and Data Analysis*, to appear.

	<h2>Published Books</h2>	
--	--------------------------	--

Davis, R. A., Holan, S. H., Lund, R. & **Ravishanker, N.** (2016). *Handbook of discrete-valued time series*. New York, NY: Chapman & Hall/CRC.

Ravishanker, N., & Dey, D. (2002). *A first course in linear model theory*. New York, NY: Chapman Hall/CRC.



	<h1>Elizabeth Schifano</h1> <p>Assistant Professor</p>	
--	--	--

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

Elizabeth Schifano presented invited talks at the Statistical Society of Canada (SSC) Annual Meeting, McGill University, Montreal, QC, June 2018; the Modern Modeling Methods Conference, University of Connecticut, Storrs, CT, May 2018; and the New England Statistics Symposium, UMass Amherst, Amherst, MA, April 2018

	<h2>Grants</h2>	
--	-----------------	--

Elizabeth Schifano was a co-investigator on a grant funded by Travelers Insurance entitled “Modeling and Analysis of Large Insurance Claim and Occurrence Data: A partnership between UConn and Travelers Insurance” with PI Dipak Dey (2017 – 2018). She is also a co-investigator in an American Heart Association study with PI Beth Taylor, entitled “Near Infrared Spectroscopy (NIRS) to Diagnose Statin Myopathy” (2017-2019). With co-PIs Kun Chen and Jun Yan, Elizabeth was also awarded a grant funded by the University of Connecticut entitled “Data Science Lab: Real World Data Science Problems Meet Future Data Scientists” (2017-2018).

	<h2>Outreach</h2>	
--	-------------------	--

Elizabeth Schifano is an elected member of the Applied Public Health Statistics Section Council of the American Public Health Association (APHA), and served as an NSF Panel Reviewer in February 2018.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

Wu, J., Ibrahim, J.G., Chen, M-H., **Schifano, E.D.**, and Fisher, J.D. (2018) Bayesian Modeling and Inference for Nonignorably Missing Longitudinal Binary Response Data with Applications to HIV Prevention Trials. *Statistica Sinica*, 28(4) 1929–1963.

Wu, J., de Castro, M., **Schifano, E.D.**, and Chen, M-H. (2018) Assessing covariate effects using Jeffreys-type prior in the Cox model in the presence of a monotone partial likelihood. *Journal of Statistical Theory and Practice*, 12(1), 23–41.

Wang, C., Chen, M-H., Wu, J.†, Yan, J., Zhang, Y., and **Schifano, E.D.** (2018) Online Updating Method with New Variables for Big Data Streams. *Canadian Journal of Statistics*, 46(1), 123–146.

Sofer, T.*, **Schifano, E.D.***, Christiani, D.C., and Lin, X. (2017) Weighted Pseudolikelihood for SNP Set Analysis of Multiple Secondary Phenotypes in Case-Control Genetic Association Studies. *Biometrics*, 73(4), 1210–1220. *Authors contributed equally.



	Richard Vitale Professor	
--	--	--

	Selected Invited Talks	
--	-------------------------------	--

Rick was invited to contribute a paper to a memorial volume in honor of the late V.N. Sudakov: 2017. On an exponential functional for Gaussian processes and its geometric foundations. *Zap. Nauchn. Sem. S.-Peterburg. Otdel. Mat. Inst. Steklov. (POMI)* 457, 101–113.

	Selected Publications	
--	------------------------------	--

Fresen, D., & **Vitale, R.A.** (2014). Concentration of random polytopes around the expected convex hull. *Electronic Communications in Probability*, 19(59), 1–8.

Vitale, R.A. (2010). Convex bodies and Gaussian processes. *Image Analysis and Stereology*. 29, 13–19.

Rubin, H., & **Vitale, R. A.** (1980). Asymptotic distribution of symmetric statistics. *Ann. Statist.*, 6, 165-170.

Artstein, Z., & **Vitale, R. A.** (1975). A strong law of large numbers for random compact sets. *Ann. Probab.* 3, 879-882.



	<h1>HaiYing Wang</h1> <p>Assistant Professor</p>	
--	--	--

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

- 2018 Joint Statistical Meetings, Vancouver, Canada, July 28 - August 2, 2018.
- The 8th International Forum on Statistics, Renmin University of China, Beijing, China, July 1-2, 2018.
- The Seventh International Biostatistics Workshop of Jilin University, Changchun, China, June 29 - July 1, 2018.
- The second Symposium of complex data analysis, Xian, China, June 23, 2018.
- The 2nd International Conference on Econometrics and Statistics, City University of Hong Kong, Hong Kong, China, June 19-21, 2018.
- The 2018 ICSA Applied Statistics Symposium, New Brunswick, New Jersey, June 14-17, 2018.
- The Workshop of Design of Experiments: New Challenges, Centre International de Rencontres Mathématiques, Marseille, France, April 30 - May 4, 2018.
- The 10th International Conference of the ERCIM WG on Computational and Methodological Statistics, University of London, UK, December 16-18, 2017.
- Department of Mathematical and Statistical Sciences, University of Alberta, Edmonton, Alberta, Canada, Nov 22, 2017.
- Design and Analysis of Experiments Conference 2017, University of California - Los Angeles, Los Angeles, CA, October 12 - 14, 2017.

	<h2>Grants</h2>	
--	-----------------	--

- Principal investigator of Simons Foundation Collaboration Grant (09/01/2017-08/31/2022).
- NSF DMS-1812013, "Collaborative Research: Information-based subdata selection inspired by optimal design of experiments.
- NVIDIA Corporation GPU Grant, Sole PI, Quadro P6000.
- University of Connecticut Research Excellence Program, "Subdata Selection for Statistical Inference with Big Data and Rare Events Data

	<h2>Outreach</h2>	
--	-------------------	--

BI-UConn Summer Academy Volunteer.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

Wang, H., Yang, M. and Stufken, J. (2018). Information-Based Optimal Subdata Selection for Big Data Linear Regression. *Journal of the American Statistical Association*, 1-13, <https://doi.org/10.1080/01621459.2017.1408468>.

Wang, H., Zhu, R., and Ma, P. (2018). Optimal Subsampling for Large Sample Logistic Regression. *Journal of the American Statistical Association*, 113:522, 829-844.



	<h1>Xiaojing Wang</h1> <p>Assistant Professor</p>	
--	---	--

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

Xiaojing Wang gave the special invited talk in 2nd International Conference on Econometrics and Statistics in June 2018. Moreover, Xiaojing Wang has been invited to present in several national and international conferences, including 2018 International Symposium on Business and Industrial Statistics, 2018 World Meeting of International Society for Bayesian Analysis and Conference on Bayesian Modeling, Computation, and Applications in Honor of Professor Lynn Kuo. In addition, Xiaojing Wang presented an invited seminar talk in the Department of Mathematics and Statistics, University of Massachusetts.

	<h2>Grants</h2>	
--	-----------------	--

Xiaojing Wang is the PI on a research grant from Sanofi-Aventis, U.S., for “*Development of Statistical Methodology for Identifying Respondent Subgroups Using Biomarker Signature*” from 05/23/2016 to

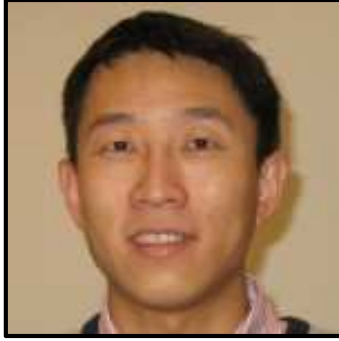
08/31/2018. Also, Xiaojing Wang serves as a Co-PI on a research training grant from The Travelers Companies for "Modeling and Analysis of Large Insurance Claim and Occurrence Data: A Partnership Between UConn and Travelers" from 08/01/2017 to 07/31/2018.

	<h2>Outreach</h2>	
--	-------------------	--

Xiaojing Wang is a member of the Committee on Membership Retention and Recruitment for American Statistical Association from 2016 to 2018. In addition, she has organized Invited Session for 2018 Meeting of Applied Statistics Symposium for International Chinese Statistical Association.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. (with Y. Zhou and Y. Liu) (2018). Semiparametric Varying-Coefficient Partially Linear Model with Auxiliary Covariates", *Statistic and its interface*, 11 (4): 587-602.
2. (with M. Gu and J. O. Berger) (2018). Robust Gaussian Stochastic Process Emulation. *Annals of Statistics*, 46 (6A): 3038-3066 .
3. (with W. Li, M.-H. Chen and D. K. Dey) (2018). Bayesian Design of Non-Inferiority Clinical Trials via the Bayes Factor. *Statistics in Bioscience*, 10: 439-459.
4. (With Y. Xie, A. M. Wilson and J. A. Silander) (2018). Predicting Autumn Phenology: How Deciduous Tree Species Respond to Weather Stressors. *Agricultural and Forest Meteorology*, 250-251: 127-137.



	<h1>Jun Yan</h1> <h2>Professor</h2>	
--	-------------------------------------	--

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Jun Yan is an Associate Editor of *Ecological and Environmental Statistics*.

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

1. Spatial Estimating Equations for Extremes Modeling and Application to Detection and Attribution of Changes in Climate Extremes, 07/30/2018, Joint Statistical Meetings, Vancouver, Canada
2. Fingerprinting Changes in Climate Extremes with Joint Modeling of Observations and Climate Model Simulation, 07/03/2018, 2018 ICSA China Conference with the Focus on Data Science, Qingdao, China.

	<h2>Grants</h2>	
--	-----------------	--

NSF DMS1521730, 2015/09/01 --- 2018/8/31: Fingerprint Methods for Detection and Attribution of Changes in Climate Extremes with Spatial Estimating Equations. \$100,000. PI: Jun Yan.

	<h2>Outreach</h2>	
--	-------------------	--

2016--present, Editor, LIDA Newsletter, the official newsletter of the Lifetime Data Science Section, American Statistical Association.
 2018-2019, Awards Chair, Section on Statistical Computing and Section on Statistical Graphics, American Statistical Association.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Bader, B., Yan, J., and Zhang, X. (2018): Automated threshold selection for extreme value analysis via goodness-of-fit tests with application to return level mapping. *Annals of Applied Statistics* 12(1): 310--329.
2. Chiou, S., Xu, G., Yan, J., and Huang, C. (2018): Semiparametric estimation of the accelerated mean model for panel count data with informative examination times. *Biometrics* 74: 944--953.
3. Vaughan, G., Aseltine, R.~H, Chen, K., and Yan, J. (2017): Stagewise estimating equations with grouped variables. *Biometrics* 73(4): 1332--1342.
4. Wang, Z., Jiang, Y., Wan, H., Yan, J., and Zhang, X. (2017): Detection and attribution of changes in extreme temperatures at regional level. *Journal of Climate* 30(17): 7035--7047.

	<h2>Published Books</h2>	
--	--------------------------	--

1. Hofert, M., Kojadinovic, I., Maechler, M., and Yan, J. (2018): *Elements of Copula Modeling with R*. Springer.
2. Dey, D.~K. and Yan, J. (eds.) (2015): *Extreme Value Modeling and Risk Analysis: Methods and Applications*. Chapman & Hall/CRC. New York, NY: Chapman & Hall/CRC.



	<h2>Yuping Zhang</h2> <p>Assistant Professor</p>	
--	--	--

	<h2>Editorial Boards</h2>	
--	---------------------------	--

Yuping Zhang is a member of the editorial board of *Frontiers in Bioinformatics and Computational Biology*.

	<h2>Selected Invited Talks</h2>	
--	---------------------------------	--

July 2018, ICSA China Conference with the Focus on Data Science, Qingdao, China **July 2018**, The International Forum on Statistics, Beijing, China **June 2018**, ICSA 2018 Applied Statistics Symposium, New Brunswick, New Jersey, USA **May 2018**, Conference on Bayesian Modeling, Computation, and Applications in honor of Professor Lynn Kuo, Storrs, CT, USA **May 2018**, Modern Modeling Methods Conference, Storrs, CT, USA **April 2018**, The 32st New England Statistical Symposium, Amherst, MA, USA **October 2017**, Joint UConn/UMass Statistics Colloquium, Amherst, MA, USA

	<h2>Grants</h2>	
--	-----------------	--

University of Connecticut Research Excellence Program Award (PI) • University of Connecticut Scholarship Facilitation Fund (PI).

	<h2>Outreach</h2>	
--	-------------------	--

Grant panelist for Alzheimer’s Association Research Grant Program, 2017 • IBM Best Paper Award and Liberty Mutual Best Poster Award Committee Chair, the 31st New England Statistics Symposium, 2017 • Young Researcher Award Committee, The 10th International Chinese Statistical Association International Conference on Global Growth of Modern Statistics in the 21st Century, 2016.

	<h2>Selected Publications</h2>	
--	--------------------------------	--

1. Zhang, Y. (2018) Lagged Principal Trend Analysis for Longitudinal High-dimensional Data. *Stat*, 7:e213.
2. Chen, Y., Zhang, Y., Ouyang, Z. (2018) LISA: Accurate reconstruction of cell trajectory and pseudo-time for massive single cell RNA-seq data. *Pacific Symposium on Biocomputing*. 2019. In press.
3. Zhang, Y. and Ouyang, Z. (2018) Joint principal trend analysis for longitudinal high-dimensional data. *Biometrics*, 74(2), 430-438.
4. Zhang, Y., Linder, M. H., Shojaie, A., Ouyang, Z., Shen, R., Baggerly, K. A., Baladandayuthapani V, and Zhao, H. (2018). Dissecting pathway disturbances using network topology and multi-platform genomics data. *Statistics in Biosciences*, 10(1), 86-106.

From the Director of the Statistical Consulting Services (SCS)



Report from the Director of the Statistical Consulting Services

By: Ming-Hui Chen

The **Statistical Consulting Services (SCS)** had another busy and productive year. In the fall 2017, the SCS team consisted of Renjie Chen, Sarah Crothers, Aritra Halder, M. Henry Linder, Disheng Mao, Jinjian Mu, Qi Qi, Chen Zhang, Cheng Zhang, Di Zheng, and Yan Zhuang. In spring 2018, Shariq Mohammed and Fan Zhang joined the team in addition to those who had worked in the SCS while Aritra Halder and Disheng Mao left the SCS for the other assignment. During the academic year, the SCS was jointly funded by Office of the Vice President for Research (OVPR), Dean's Offices of CLAS and CAHNR, and Department of Statistics. In fall 2017 and spring 2018, one full consulting project (1 full GA, 20 hours per week) was supported by UConn Facilities Operations & Building Services. This project has also been extended to the academic year 2018-2019 with the same amount financial support from UConn Facilities Operations & Building Services. With the support from the Department of Statistics, SCS offered full-consulting projects, walk-in, and online services in June, July, and August

2018. Qi Qi was the graduate assistant who provided these statistical consulting services in the summer. Sarah graduated in May 2018 and she left the SCS after summer 2018. She had served as a Student Administrative Specialist in SCS since January 2015.

In fall 2017 and spring 2018, SCS provided three types of full-consulting project service, walk-in services, and online services. Walk-in services with 20 and 14 walk-in hours per week in fall 2017 and spring 2018, respectively. Two graduate assistants were assigned to provide online services. In the fall 2017, we had 7 full-consulting projects and provided our walk-in consulting services to 50 clients and online services to 12 clients. In spring 2018, the SCS provided services to 14 clients for full-consulting projects, 41 clients for walk-in services, and 17 clients for online services. In summer 2018, SCS provided services to 2 clients for full-consulting projects, 20 clients for walk-in services, and 14 clients for online services.

SCS hosted two workshops on "Variable Selection" and "Applied Survey Data Analysis" in Fall 2017 and three workshops on "Power Analysis for ANOVA and Repeated Measures ANOVA", "Data Visualization with R Shiny", and "Missing Data in Surveys" in Spring 2018. One hundred sixty-seven participants registered these workshops. Qi Qi and Renjie Chen, Disheng Mao and Aritra Halder, Renjie Chen, Shariq Mohammed, and Di Zheng prepared and presented these five workshops.

On May 10, 2018, SCS launched the third annual workshop day. This workshop day features four themed sessions that cover

“Data Visualization and Exploratory Data Analysis: Interactive Tools for Statistical Consulting”, “Methods and Tools for Exploratory Data Analysis with R”, “Analysis of Patient-Reported Outcomes”, and “Incorporating Statistics into Research Grants”.



Sarah Crothers & Henry Linder

Session 1 started with a presentation of Sarah Crothers, a senior undergraduate student majoring in statistics and minoring in business, on a 10-year progress of SCS (2008-2018). The second presenter in Session 1 is Henry Linder, a PhD student in statistics. Henry showed several interactive tools created using R Shiny and examples demonstrating the unique insights of statistical graphics for an ongoing consulting project with the University's office for Utility Operations and Energy Management. In Session 2, Yan Zhuang and Chen Zhang, PhD students in statistics, provided an overview of methods and tools for EDA with R and demonstrated the graphical tools and R codes via examples.



Yan Zhuang & Chen Zhang

Patient-reported outcomes (PROs) are often relevant in studying a variety of diseases and outcomes that cannot be assessed adequately without a patient's evaluation and whose key questions require patient's input on the impact of a disease or a treatment. In Session 3, Dr. Joseph C. Cappelleri, an executive director of biostatistics in the Statistical Research and Data Science Center at Pfizer Inc, presented the key elements on the development of a PRO measure, the core topics of validity and reliability of a PRO measure, techniques to understand the underlying structure of a PRO measure, and other related topics of PRO. The workshop day was concluded with the last featured presentation given by Dr. James Grady, Director of the Biostatistics Center for the Connecticut Institute for Clinical and Translational Science (CICATS) at the University of Connecticut and Professor in the School of Medicine. Dr. Grady discussed the main statistical components of research grants required for successful applications. He also provided a review of study types and their statistical characteristics, formulation of specific aims and hypotheses, development of a statistical plan for a research grant, sample size and power, and practical advice on how to justify the sample size.



Joseph C. Cappelleri & James Grady

The workshop day was held in Lawrence D. McHugh Hall (MCHU) 101. Lunch was provided to all participants in the Union Street Market (USM). All participants picked up lunch cards during registration on May 10, 2018. About 61 attended this workshop day. Chen Zhang was also the overall coordinator of the third SCS annual workshop day.

In 2018, the SCS team also developed and presented two special mini-workshops in the School of Pharmacy. Mini-Workshop 1 on “FDA-compliant Drug Dissolution/Release Analysis” was developed by Fan Zhang and Cheng Zhang in collaboration with Andre Beringhs, a graduate student in the School of Pharmacy. This workshop was presented on May 12, 2018. The second mini-workshop on “Survival Analysis and Study Design” was developed by Qi Qi and Jinjian Mu in collaboration with Derek Hargrove, a graduate student in the School of Pharmacy. This workshop was presented on October 9, 2018. Both workshops were well received by graduate students in the School of Pharmacy.

Pfizer Global Research & Development Student Fellowship Program (December 2007 - Summer 2019)

In December 2007, the Department of Statistics at University of Connecticut and the Global Research & Development of Pfizer Inc. signed a

joint agreement to develop a Fellowship program. Wangang Xie was the first Student Fellow. Under the agreement, he worked at Pfizer 10 hours each week in spring 2008 and 20 hours each week in summer and fall 2008. In November 2008, the Department of Statistics at the University of Connecticut and the Global Research & Development of Pfizer Inc. signed a joint agreement for the extension of the Fellowship program. Miaomiao Ge became the second Student Fellow under this agreement. This agreement was extended several times. Ms. Ge was the Student Fellow until August 2011. In fall 2011 to fall 2014, Ouyang Guang was the third Pfizer Student Fellow. Jing Wu became the fourth Pfizer Student Fellow in spring 2015. Ms. Wu worked as a student fellow at Pfizer in the 2015-2016 academic year and continues to work in the summer and fall of 2016 as well. Daoyuan Shi was the student fellow at Pfizer in spring and summer 2017. Lijiang Geng has been the student fellow at Pfizer since fall 2017. Pfizer has extended this fellowship program to 2018-2019 for the academic year as well as summer 2019.

Collaboration with School of Nursing (Fall 2007-Spring 2019)

From fall 2007 to spring 2011, the School of Nursing hired Ms. Miaomiao Ge, a Ph.D. student of the Department of Statistics, as a half-time student assistant under supervision of Professor Ming-Hui Chen. In August 2011, the School of Nursing hired Ms. Danjie Zhang as Miaomiao Ge’s replacement. Ms. Zhang worked at the School of Nursing 10 hours each week as a half-time graduate assistant in 2011-2012, 2012-2013, and 2013-2014 academic years. In the 2014-2015 academic, Ms. Jing Wu replaced Ms. Danjie Zhang. Ms. Wu worked at the School of Nursing in the 2015-2017 academic years. Ms. Hao Li was the graduate assistant, who worked 10 hours per week in the School of Nursing for the academic year 2017-2018. The School of Nursing has extended a half RA support for the 2018-2019 academic year. Yiming Zhang is the current graduate assistant, who spends 10 hours per week in the School of Nursing.

UConn and Travelers Team Up for Insurance Research

The Department of Statistics, University of Connecticut, under the leadership of Prof. Dipak Dey, has developed a strong partnership with Travelers insurance company which fund research into auto insurance decisions, train students in techniques to model drivers' behaviors, and ultimately create jobs in Connecticut for UConn graduates and other skilled analysts.

Travelers has funded fellowships for four graduate students and faculty in the Department of Statistics, on various projects relating to auto insurance in conjunction with drivers' geographic location, driving patterns and weather related problems.

This collaboration with Travelers is one example of the many business partnerships at UConn that give our students the knowledge and skills they need to succeed in the workplace.

Travelers and UConn students are both getting significant benefits from the collaboration. It's great for Travelers because they're getting trained people to do this research to help reduce the costs of insurance, says Dey. "And it's great for our students because this is real on-the-job training, which will make our students highly competitive targets for recruitment. There is a short supply of experts in this area."

The research is unique, Dey says, because it combines knowledge of statistical modeling and high power computing with an understanding of the social factors that predict people's behaviors

Third-year statistics Ph.D. student Aritra Haldar came to UConn for graduate work. He says that the opportunity to get hands-on industry experience while still doing his degree gives him a big leg up.

"When you do a Ph.D., you don't always get a chance to learn about the business side of things before you graduate," says Haldar, whose research will focus on building predictive models to understand the insurance claim using geo spatial and temporal modeling. "When your work is based on theoretical data, it's hard to get an idea of the issues facing real people."

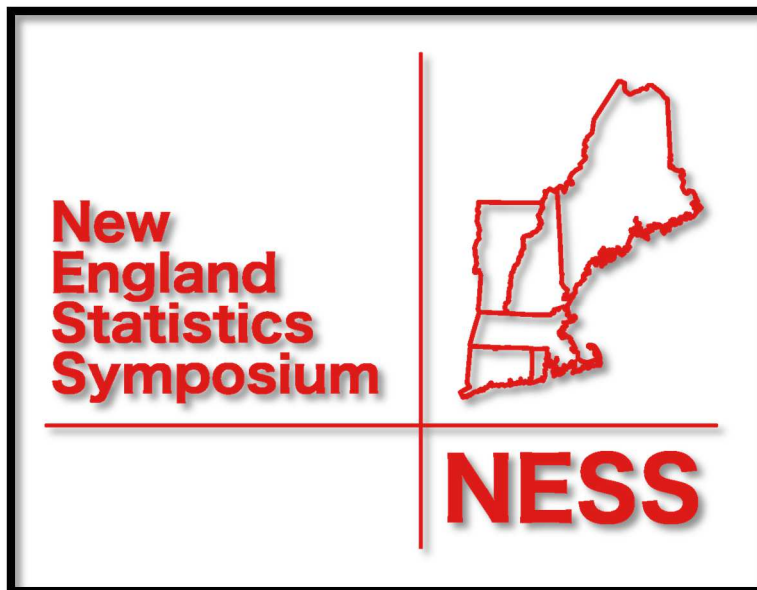
Dey sees potential for this program to extend to other parts of the College of Liberal Arts and Sciences, such as economics and sociology, and other schools, such as Engineering.

"Students and faculty from many departments of the College of Liberal Arts and Sciences and across the University can benefit from this partnership," he says.

An Update from the New England Statistical Society

By Kun Chen, NESS Secretary

With the support from all of our members, the New England Statistical Society (NESS) had made significant progress on various fronts in 2018.



The 32nd New England Statistics Symposium was successfully held on April 13-14 at University of Massachusetts, Amherst, and the event attracted more than 250 participants. The theme of NESS 2018 was “Data - Science - Society”, reflecting the growing role that data and statistical sciences are playing in shaping and improving society. The purpose of the symposium, as usual, was to bring together statisticians from all over New England to a central location to share research, discuss

emerging issues in the field, and network with colleagues. The symposium featured four short courses, two invited plenary talks, ten invited sessions, and a contributed poster session. Additionally MassMutual sponsored a student poster competition and IBM sponsored a student paper competition. The symposium was co-hosted by the Department of Mathematics and Statistics with the Department of Biostatistics and Epidemiology of the University of Massachusetts-Amherst, and the organizing committee consisted of Dr. Anna Liu (co-Chair), Dr. Nicholas Reich (co-Chair, NESS VP for Scientific Program), Dr. Raji Balasubramanian, and Dr. Patrick Flaherty from the University of Massachusetts, and Dr. Jianan Hui and Dr. Yihua Zhao from Boehringer Ingelheim. More details about the past symposiums can be found at <https://nestat.org/events/symposium/>. The 2019 symposium will be back to UConn, and the 2020 symposium will be hosted by the Department of Computer Science and Statistics, University of Rhode Island.

A Symposium Honoring the 95th Birthday of Herman Chernoff

NESS and the ASA Boston Chapter co-organized the symposium “Celebrating the Foundations and Impact of Statistics: A Symposium Honoring the 95th Birthday of Herman Chernoff” on April 27, 2018 at the Harvard University. This symposium featured speakers who are former students and former collaborators of Professor Chernoff, and researchers influenced by Professor Chernoff's work.

Chernoff Excellence in Statistics Award

The Society has created the Chernoff Excellence in Statistics Award to commemorate Herman Chernoff's outstanding, long-term contributions to the field of statistics. These contributions include work on large sample theory, experimental design, sequential analysis, methods of presenting statistical data in visual form, and statistical decision making. The Chernoff Excellence in Statistics Award is the most prestigious award bestowed by the NESS, given to an individual who, in the tradition of Herman Chernoff's work, has made exceptional contributions to theory, methodology, or novel applications to statistics and/or data science. The award will be given to one recipient every year at the New England Statistics Symposium, with travel expenses covered plus a minimum of \$500 honorarium. The first award is targeted for 2019, and nominations for the award are to be submitted by December 15, 2018. For more details on this award and for making donations, please visit <https://nestat.org/hcaward/>.

2018 Data Science Day

On October 27, 2018, we hosted our first Data Science Day event at Yale (<https://nestat.org/nextgen/dsd/>). The event was organized by our Committee on NextGen led by NESS VP Dr. Jessi Cisewski, for supporting the next generation of statisticians and data scientists. Two keynote speakers were Dr. Katherine Wallman, former chief statistician at the United States (1992-2017), and Xiao-Li Meng, founding President of NESS and Whipple V. N. Jones Professor of Statistics at Harvard. The event featured a poster session and four panel sessions on career development in statistics and data science, the experience of being a data scientist in industry, recent development and future trends in machine/deep learning, and modern statistical development in big data.

NESS Colloquium Series & Short Courses

We have established the NESS Colloquium Series, and had three exceptional talks given by Yann LeCun from Facebook, Michael Jordan from UC Berkeley and Renee Moore from Emory (<https://nestat.org/nesscolloquium/>). (Please contact us if your institution is interested in sponsoring a future talk). NESS has reached out to several local companies, including GP Strategies Corporation and Hartford Stem Boiler Inspection and Insurance Company, to coordinate and offer NESS short courses on statistics and data science topics of their genuine business needs. Under the leadership of Dr. Nalini Ravishanker, NESS VP for Education, the NESS offered two one-day short courses in the fall 2018. The first course entitled “An Introduction to

Time Series Analysis” was held on October 19, 2018 at The Hartford Steam Boiler Inspection and Insurance Company (HSB). The instructors for this short course were Dr. Nalini Ravishanker of University of Connecticut and Dr. Jian Zou of the Worcester Polytechnic Institute. The second short course entitled “Survival Analysis” was held on November 2, 2018 at Pratt & Whitney and the instructors were Dr. Gregory Vaughan of Bentley University and Drs Jun Yan and Ming-Hui Chen of University of Connecticut, who delivered Part I: Introduction to Survival Analysis: Basic Models and Model Assessment (Greg); Part II: Models and Methods for Recurrent Event Data (Jun); and Part III: Joint Modeling of Survival and Longitudinal Data (Ming). We’ve also made progress towards establishing our own journal with an innovative publishing model for promoting the role of statistics in data science.

Sponsored Events

NESS cosponsored several events throughout the year, including the ICSA Applied Statistics Symposium at Rutgers in June, the R/Medicine Conference at Yale in September, and the Pfizer Distinguished Statistician Colloquium Series featuring Professor Grace Wahba at UConn in September.

Leadership & 2018 Election

As of June 1, 2018, Xiao-Li Meng has become the Past President and Ming-Hui Chen has become the President. Nick Reich at UMass has stepped down from the position of VP for Scientific Program, and Gavino Puggioni at the U. of Rhode Island has been appointed as the new VP with a two-year term.

The society (NESS) launched its first election in November. We are pleased to announce the results of the 2018 NESS election.

- President-Elect for 2018 – 2020:

[Joseph C. Cappelleri](#), Pfizer Inc

- Council Member for 2018 – 2020:

[Yasuo Amemiya](#), IBM Thomas. J. Watson Research Center

[Jason P. Estes](#), Pratt & Whitney

[Roe Gutman](#), Brown University

[Priya Kohli](#), Connecticut College

[Eric Kolaczyk](#), Boston University

[Ambar Sengupta](#), University of Connecticut

[John Zhong](#), Biogen Inc

Congratulations!

We would also like to take this opportunity to acknowledge the past officers and council members, Nicholas Reich (VP, 2017-2018), Jennifer McGinniss (Council member, 2017-2018), Gavino Puggioni (Council member, 2017-2018) and Shannon Stock (Council member, 2017-2018), for their great service to the society. Without the support from devoted members like them, the establishment and the rapid growth of our young society would not have been possible.

To learn more about NESS, please visit <https://nestat.org>.

We sincerely invite you to join us.

Best Regards,

Kun Chen

NESS Secretary

On Behalf of NESS Executive Committee

We sincerely invite you to join us.



2018 New England Statistics Symposium. Keynote speech by Professor Montse Fuentes, Dean of the Virginia Commonwealth University College of Humanities and Sciences.



2018 New England Statistics Symposium. Keynote speech by Dr. Dawn Woodard, Director of Data Science, Maps at Uber.



2018 New England Statistics Symposium. Student Awards.

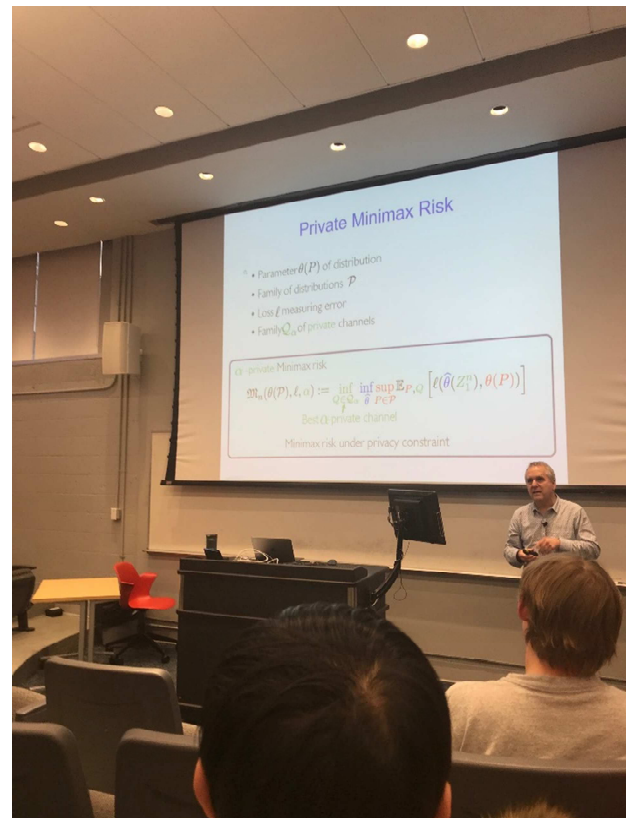
←

Panel Discussion at the Herman Chernoff Symposium



NESS Colloquium Series. Talk by Professor Michael Jordan.

→





NESS | New England Statistical Society

NEW ENGLAND STATISTICS SYMPOSIUM SINCE 1987 & NEW ENGLAND STATISTICAL SOCIETY SINCE 2017

Membership Registration Form

Last Name:

First Name:

Middle Name:

Membership Type: Student Regular Life NESS/IMS K-12 Educator

If Student Members, Expected Graduation Year:

Email Address:

Phone Number:

Employer:

Address Line 1:

Address Line 2:

County/City:

State/Province:

Zip Code:

Country:

Signature & Date

- *Student Membership is free.*
- *Regular membership: \$30 per year.*
- *Life membership: \$600.*
- *K-12 educator enjoys 50% discounted on regular membership (\$15 per year) and life membership (\$300).*
- *Joint membership with Institute of Mathematical Statistics (IMS) is \$109 per year.*

Please send the form and a check to:

New England Statistical Society (Attn: Lynn Kuo)

Room 306, Philip E. Austin Building

215 Glenbrook Rd. U-4120

Storrs, CT 06269-4120



UConn Statistics Biopharmaceutical Summer Academy

**Starts: August 6, 2018
to
Ends: August 24, 2018**



The three-week summer academy will be an immersive, collaborative, dynamic and academic experience for students who are planning to pursue a career as a statistician/programmer in pharmaceuticals and health analytics. This program aims to bring together statisticians, clinicians, regulators, drug safety, medical writers, marketers and academics who will provide guidance on drug development, their perspective on an out-standing statistician/programmer and what can get you there.

UCONN

UNIVERSITY OF CONNECTICUT

Week 1

August 6-8 @ Ridgefield

Monday 8/6

1. Panel Discussion: Clinicians, Drug Safety, Marketing, Medical Writing
2. Changing landscape of Statistics – Leadership Talk
3. Panel Discussion: Statisticians, Programming, Data Managers, CDSS

Tuesday 8/7

1. Introduction to Clinical Development
2. Case Study Using Mock Trial Data

Wednesday 8/8

1. Overview of Biostatistics and Data Sciences and Principles of BI – Leadership Talk
2. Deep Dive into Different Functions of BI – Leadership Talk
3. Lifecycle of the Data
4. Current Best Practices of Data Management and Programming

August 9-10 @ Storrs

Training and Homework

Invited Speakers

Anthony D’Amico is the Eleanor Theresa Walters Distinguished Chair, Chief of Genitourinary Radiation Oncology at the Dana-Farber Cancer Institute and Brigham and Women’s Hospital, Chair of the residency executive committee in the Harvard Radiation Oncology Program, and Advisory Dean and Chair of career advising and mentorship at Harvard medical School.

Dr. D’Amico is an internationally known expert in the treatment of prostate cancer and has defined combined modality staging, which is used to select patients with localized prostate cancer for specific surgical or radiotherapeutic treatment options. He is the principal investigator of several federally funded grants that support his investigations in Image Guided Therapy for early stage prostate cancer, drug development for advanced stage prostate cancer, and clinical trials that are aimed at defining future management strategies for men with prostate cancer.



Dipak K. Dey, is a Board of Trustees Distinguished Professor of Statistics, at the University of Connecticut. He received his Ph.D. in Statistics from Purdue University in 1980. He is an elected fellow of the American Association for the Advancement of Science, American Statistical Association, the Institute of Mathematical Statistics, International Society for Bayesian Analysis, Connecticut

Academy of Arts and Sciences and an elected member of the International Statistical Institute. Some of the awards and honors Dey has received include the Outstanding Alumni award from the Department of Statistics, Purdue University, the first Marth award for mentorship from the University of Connecticut, the Research Excellence Award from the University of Connecticut Alumni Association, 2005 and the Research Excellence Award from the American Association of the University Professor, University of Connecticut. He has published ten books/edited volumes and over 265 refereed journal articles and book chapters in various statistical and interdisciplinary journals. His research area includes, statistical methodology and applications involving categorical and longitudinal data, classification and clustering, spatio-temporal and survival data analysis. Areas of his research applications include Biometry, Bioinformatics, Data mining, Environmetrics, Econometrics, Image processing, Morphometry, and Population Genetics.



Organizers

UCONN

Ming-Hui Chen

Lynn Kuo

Tracy Burke

Anthony Luis

UConn Instructors

HaiYing Wang

Haim Bar

Jun Yan

Kun Chen

Ming-Hui Chen

Boehringer-Ingelheim

Qiqi Deng

Dooti Roy

Boehringer-Ingelheim Panelists outside Biostatistics & Data Sciences

Thomas Leonard

Amy Van Andel

Mike Kavanaugh

Michael Sand

Boehringer-Ingelheim Panelists within Biostatistics & Data Sciences

Miguel Garcia Jr.

Ziwei Yin

Hongli Lu

Lisa Squibb

Cynthia Kolesar

Santosh Sankaran

Steven Hughes

Yaoshi Wu

Boehringer-Ingelheim Group Leaders

Yaoshi Wu

Jianan Hui

Juxian Geng

Rui Wu



Boehringer-Ingelheim Trainers

Dan Cotton
Shaun Bender
Miaomiao Ge
Naitee Ting



Thank you to our Associate Dean Robin Cote for giving the final Day wrap up speech and being so supportive of the Summer Academy first year initiative.

FDA/Center for Drug Evaluation & Research Guest Speaker



Dr. Lan Huang received her Ph.D. in Statistics from University of Connecticut in 2004. From 2004 to 2009, Dr. Huang worked on cancer surveillance at national cancer institute (NCI). Dr. Huang joined FDA/CDER in 2009 as a statistical reviewer and moved to FDA/CDRH in 2016. She has reviewed submissions for both therapeutic and diagnostic products/devices and has participated in regulatory research for methodologies to improve the quality of review in statistical analysis in clinical trials and safety surveillance in CDER and CDRH.

Biogen Guest Speakers

Week 2

August 13-15 @ Storrs

Monday 8/13

1. Training (Resume writing, Interviewing)

Tuesday 8/14

1. Statistical Analysis in Clinical Trials
2. Data Quality Monitoring during trial conduct

Wednesday 8/15

1. Training (Innovative study designs)

August 16 @ Storrs

Meeting the FDA Statistician

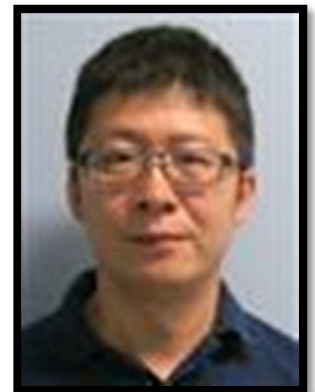
August 17 @ Block Island

Cross-culture Field Trip

John Zhong currently is the Head of Innovative Analytics and Early Development Biostatistics. He joined Biogen in 2013 with more than 20 years of experience in the industry and medical research. He has played a critical role in the use of innovative statistical methods and trial designs across multiple assets, including the successful development program for Nusinersen, the first and the only approved treatment for patients with spinal muscular atrophy (SMA). Externally, John has actively played an important role in promoting statistical innovation in drug development. He was invited by the FDA to serve in their expert panel at the Public Workshop on Promoting the Use of Complex Innovative Designs.



Peng Sun, After receiving his Ph.D. degree in statistics in 2006 from the University of Iowa, Peng Sun worked in the clinical pharmacology statistics group at Merck for four years before joining GSK. At GSK, Peng was the lead statistician for the global submission of the combination of Dabrafenib and Trametinib for the treatment of



metastatic melanoma that received accelerated approval from FDA. Peng currently works at Biogen as the clinical development statistical lead of the nusinersen program and AAV-SMN program for the treatment of Spinal Muscular Atrophy (SMA). Peng lead the global submission of nusinersen, which as the first ever treatment of SMA have received rapid approvals from many countries/regions including US, EU, and Japan.



Guochen Song joined Biogen in May 2016 as a member of the SMA clinical development team, where he applied Bayesian methods to borrow historical information for the integrated efficacy analysis to increase the probability to detect a treatment benefit. He was the Biostatistics Lead for the BG-11 development program and was the Biostatistics Lead for the SMA World Wide Medical team. He has also provided numerous technical advice and support to other development programs, including providing technical consultation to SMA gene therapy Biostatistics team about the use of innovative designs. Guochen gained his Doctor of Public Health degree majoring in Biostatistics from UNC Chapel Hill. Prior to joining Biogen, he was a Senior Scientific Advisor/Biostatistics Strategic Director at IQVIA (Quintiles)

Participants

Banerjee, Soumik	PhD STAT	UConn
Hu, Guanyu	Post Doc	UConn
Huang, Cheng	PhD STAT	UConn
Huang, Zhenyi	PhD STAT	UConn
Jiang, Zhaoli	MS BIOSTAT	UConn
Kang, Ziyi	STAT Undergrad	UConn
Li, Hongfei	PhD STAT	UConn
Liu, Qingyang	PhD STAT	UConn
Liu, Xiuyuan	MS BIOSTAT	UConn
Liu, Yang	PhD STAT	UConn
Liu, Yongqi	Visiting Undergrad	USTC
Liu, Yuxuan	Visiting Undergrad	USTC
Ma, Zhihua	Visiting PhD	Jinan University
Mu, Jinjian	PhD STAT	UConn
Paul, Tulika	PhD STAT	UConn
Pellerin, Douglas	STAT Undergrad	UConn
Purugganan, Steven	STAT Undergrad	UConn
Qi, Qi	PhD STAT	UConn
Saint Vil, Gabrielle	MS BIOSTAT	UConn
Sheikh, Md. Tuhin	PhD STAT	UConn
Sun, Zhuohao	MS STAT	UConn
Wang, Yuxin	MS STAT	UConn
Wang, Zhe	PhD STAT	UConn
Xiang, Yixin	MS BIOSTAT	UConn
Zeng, Hang	STAT & Math-STAT UG	UConn
Zhang, Xuan	MS BIOSTAT	UConn
Zhang, Yiming	PhD STAT	UConn



Week 3

August 20-21 @ Storrs

Monday 8/20

1. Label and Regulatory Review Organization
2. FDA Interaction

Tuesday 8/21

1. Database Lock and Clinical Study Report
2. Final Presentation

August 22 @ Storrs

Meeting Statisticians from Biogen

August 23 @ CT

Cross-culture Field Trip

August 24 @ Storrs

Featured Presentations

(Dipak K. Dey and Anthony V. D'Amico)

Closing Remarks, Presenting the Certificates

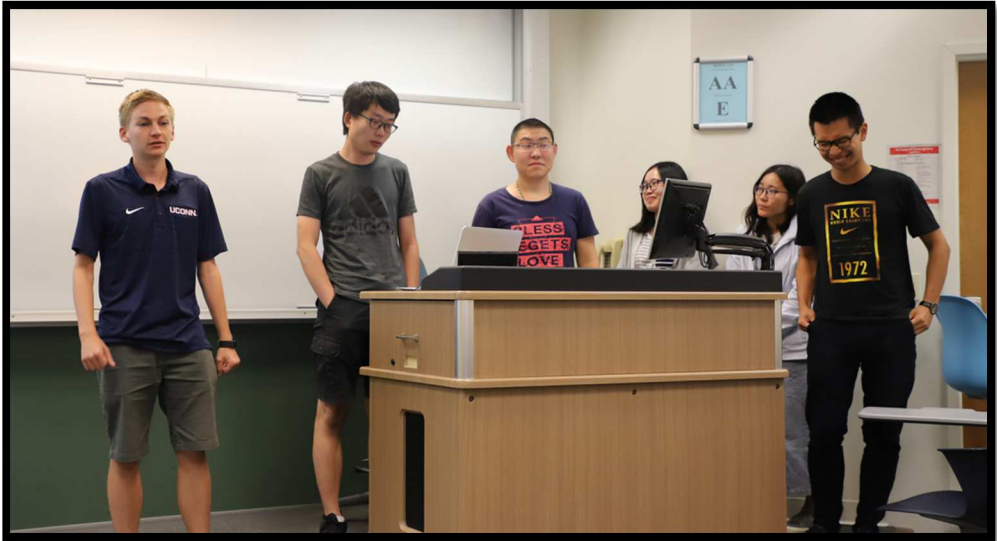
Activities:

During the second and third week of the academy our Administrative staff helped the department in reserving group charter buses and ferry tickets to Block Island and Old Sturbridge Village. These educational trips were both a great break from all the work and also a great opportunity for our international students and visitors to divulge in multicultural excursions with other international students as well.





Thank you to everyone who participated and we look forward to making this a new Annual Summer Academy. Any ideas and feedback is appreciated and can be sent to Anthony Luis at a.luis@uconn.edu



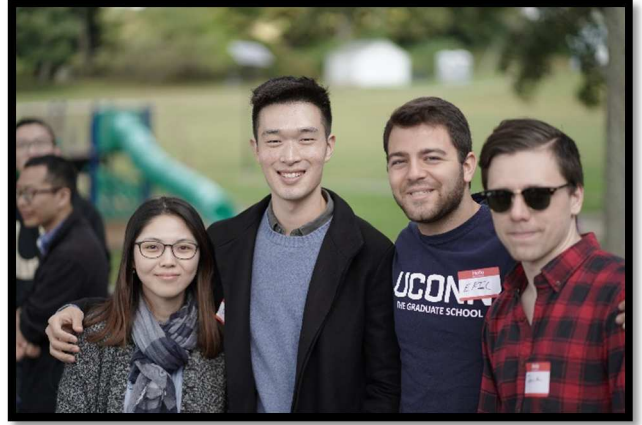
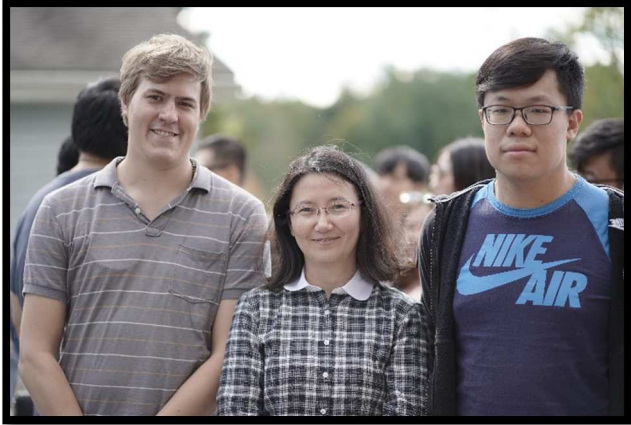


By Elizabeth Schifano

The Department of Statistics hosts an annual Fall picnic to allow new graduate students to get to know the current graduate students, faculty, staff and their families, as well as to acknowledge and provide well-deserving graduate students with Academic and Service Awards.

The 2018 picnic was again held at Patriots Park Lodge which overlooks Coventry Lake. The Graduate Student Committee, together with Professors Elizabeth Schifano, HaiYing Wang, and Yuwen Gu, organized a lovely afternoon with over 90 people in attendance. The picnic was once again a success, with beautiful weather, great food, wonderful conversation, a charming raffle, and outdoor games and sports.





Colloquia

This year we continue to have a steam of strong and excellent colloquia:

Joseph Glaz

University of Connecticut

Multiple Window Scan Statistics for Detecting a Local Change in Variance for Normal Data

Zhiyi Chi

University of Connecticut

Exact Sampling for Infinitely Divisible Distributions and Levy Processes

Jungbin Hwang

University of Connecticut

Should We Go One Step Further? An Accurate Comparison of One-step and Two-step Procedures in a Generalized Method of Moments Framework

Shuangge Ma

Yale University

Integrating Multidimensional Omics Data for Cancer Prognosis

Haoda Fu

Eli Lilly and Company

Individualized Treatment Recommendation (ITR) for Survival Outcomes

Yang Li

Remin University of China

Model Confidence Bounds for Variable Selection

Yuping Zhang

University of Connecticut

A Statistical Framework for Data Integration Through Graphical Models with Application to Cancer Genomics

Zongming Ma

University of Pennsylvania

Optimal Hypothesis Testing for Stochastic Block Models with Growing Degrees

Nehemy Lim

University of Connecticut

Balancing Statistical and Computational Precision for Efficient Variable Selection

Bin Zhou

University of Connecticut

Optimal Investment with Transaction Costs under Cumulative Prospect Theory in Discrete Time

Daniel Lewis Sussman

Boston University

Multiple Network Inference: From Joint Embeddings to Graph Matching

Zhigen Zhao

Temple University

Nonparametric Empirical Bayes Estimator for Simultaneous Variances

Amy Willis

University of Washington

Confidence Sets for Phylogenetic Trees

Christopher Glynn

University of New Hampshire

Dynamics of Homelessness in Urban America

Jessica Cisewski

Yale University

A Preferential Attachment Model for the Stellar Initial Mass Function via Approximate Bayesian Computation

Michael Jordan

University of California, Berkeley

On Computational Thinking, Inferential Thinking and Data Science

Fei Miao

University of Connecticut

Data-Driven Dynamic Robust Resource Allocation for Efficient Transportation

Fei Wang

Cornell University

Is Your Data Cheating You? Towards Explainable AI in Medicine with Knowledge Empowerment

Lucas Janson

Harvard University

Using Knockoffs to Find Important Variables with Statistical Guarantees

Paul Albert

NIH/NCI

Innovative Approaches to the Statistical Analysis of Circadian Rhythm Data: Uncovering the Patterns of Life

Renee Moore

Emory University

The Roles of Statisticians in Clinical Trials: Here, There, Everywhere

Brian Hobbs

Cleveland Clinic

Trial Design in the Presence of Non-exchangeable Subpopulations

Tyler Kleykamp

Chief Data Officer, State of Connecticut

The Emerging Role of Data in Government

James Z. Wang

Pennsylvania State University

Modeling Aesthetics and Emotions in Visual Content – From Vincent van Gogh to Robotics and Vision

Vince Lyzinski

University of Massachusetts, Amherst

Information Recovery in Shuffled Graphs via Graph Matching

Math Alliance

By: Ofer Harel

The department applied and became a graduate member of the Math Alliance (<https://mathalliance.org/welcome/>). The National Alliance for Doctoral Studies in the Mathematical Sciences, now best known as the Math Alliance, was founded in 2001 as a partnership between the math sciences departments at three Iowa State Regents universities. It later grew to encompass mathematics departments across the U.S. and recently also Statistics departments. There are currently 37 Doctoral programs affiliated across mathematics, statistics and biostatistics.

Our department joined the alliance in order to increase diversity in our student population. This year, we are working hard in order to recruit more students from commonly considered under represented populations.

Ofer Harel (ofer.harel@uconn.edu)

Paper of the Month

By: Haim Bar

In November 2017 we started featuring a selected paper on our website on a monthly basis during the academic year. The objective is to introduce papers which faculty think are important for students to know, either because they have had a significant impact on science, or they contain useful techniques or results, or because they are important historical documents in the evolution of statistical science. In the 2017-8 academic year we selected five papers and had a social gathering with faculty and graduate students to discuss each paper. The inaugural paper of the month was Efron's 1979 Bootstrap paper (Annals of Statistics), which had an enormous impact on statistics, and science in general. This was followed by the equally influential paper of Benjamini and Hochberg about controlling the false discovery rate (1995, JRSS-B), and Hoeffding's 1948 paper "A Class of Statistics with Asymptotically Normal Distribution". In April we discussed two related papers that deal with model selection – the AIC (Akaike, 1974) and the BIC (Schwarz, 1978). We concluded the year with a more humorous paper, and a 2012 Ig Nobel prize winner, from the "Journal of Irreproducible Results". Pizza and soft-drinks were served in these gatherings. This initiative was well-received by both faculty and students and we will continue it in the future. We began the 2018-9 academic year with a celebrated paper by Golub, Heath, and Wahba about the generalized cross validation method (GCV, Technometrics, 1979). Professor Wahba was the 24th speaker in the Distinguished Statistician series, which was held in Storrs on September 26-27, 2018.

For a complete list and description of the selected papers, please visit <https://stat.uconn.edu/paper-of-the-month/>

Pfizer/ASA/UConn Distinguished Colloquium Series

After a six-year hiatus, this year we renewed the Distinguished Statistician Colloquium Series. With generous funding from Pfizer, the American Statistical Association, and the Department of Statistics at UConn, the 24th colloquium in the series was held on September 26-27, 2018 and featured Prof. Grace Wahba from the University of Wisconsin-Madison. Prof. Wahba is renowned for her work in statistical theory and the development of efficient numerical and statistical methods for large data sets, and has developed methods with applications in biostatistics, weather prediction, machine learning, climate

science, and more. She was interviewed by Dr. Hao Helen Zhang from the University of Arizona and Dr. Yoonkyung Lee from The Ohio State University.

The first day included a reception, a rehearsal colloquium and interview, and a banquet dinner. It was held at the Alumni Center, and was attended by many faculty members, Pfizer employees, and representatives from the New England Statistics Symposium (NESS). Introductions were given by Dr. Dipak Dey, UConn Board of Trustees Distinguished Professor of Statistics, and Dr. Kannan Natarajan, Head of Global Biometrics and Data Management at Pfizer. Dr. Xiao-Li Meng, Professor of Statistics at Harvard University and Past President of the New

England Statistical Society, delivered an entertaining speech and a toast before dinner. The colloquium and the interview were filmed on Sept. 27 in UConn's Dodd Research Center. The videos will be added to the ASA YouTube channel in the near future.



BMCA 2018

In honor of Professor Lynn Kuo's Birthday

In honor of Professor Lynn Kuo's birthday and her distinguished career, a Conference on Bayesian Modeling, Computation and Applications was held on May 12, 2018 at UConn. The conference was well attended by more than 80 people, largely consisting of Dr. Kuo's former and current students, colleagues, and collaborators. They traveled from various places including Massachusetts, New York, Washington D. C., Cincinnati, Illinois, Nebraska, Texas, California, and South Korea.



The event started in the morning with opening remarks offered by Dr. Dipak Dey and Dr. Ming-Hui Chen, to reflect on Lynn's distinguished career and her many significant contributions to the field of statistics; they recognized that Dr. Kuo has always been an integrated part of our department ever since she joined us in 1986. The keynote speech was delivered by Dr. Bani Mallick from Texas A&M University, and there were other thirteen technical talks in three technical sessions throughout the day, given by several UConn alumni from all over the country and Lynn's collaborators and students. The speakers included Dr. Zhen Chen from National Institutes of Health (NIH), Dr. Sudipto Banerjee from University of California Los Angeles, Dr. Michael Cohen from American Institutes for Research, Dr. Yu-Bo Wang from NIH, Dr. Naitee Ting from Boehringer Ingelheim, Dr. Changhong Song from Food & Drug Administration, Dr. Wangang Xie from Abbvie, and Dr. Dipak Dey, Dr. Haim Bar, Dr. Yuping Zhang, Dr. Xiaojing Wang, Dr. Suman Neupane and Ms. Qi Qi from UConn.

A social mixer was held in the afternoon, during which all attendees celebrated Dr. Kuo's birthday together (by sharing a delicious ice cream cake from the beloved UConn Dairy Bar), and Dr. Kuo's students presented their lovely gifts to her, including a Chinese calligraphy piece of a short poem composed to show their appreciation to her. After the conference, more than fifty guests attended the dinner banquet.

The conference was organized by Lynn's past PhD graduates and current PhD students, led by Dr. Zhen Chen from National Institutes of Health, Dr. Fang Yu from University of Nebraska Medical Center and Dr. Jun Ying from University of Cincinnati, with local assistance from our department coordinated by Professor Kun Chen. More details on the conference can be found at <http://bmca.stat.uconn.edu>.



The Second International Conference in Stochastic Processes: In Honor of Professor Dipak K. Dey's Birthday

The Second International Conference in Stochastic Processes: Random Phenomena and Their Applications: In Tribute to the 65th birthday of Professor Dipak K. Dey was held at the National University of Engineering, in Lima, Peru from October 3 to 6, 2018.

Besides the plenary presentation of Prof. Dey, other invited speakers include Debajyoti Sinha, Taps Maiti, Karthik Bharath, Vicente Cancho, Anatoly Yambartsev, Artem Logachev, Cristian Coletti, Joel Beltran, Jose Cerda and Gabriel Rodriguez. The conference was attended by more than 100 participants including former students and associates of Prof. Dey and many other local researchers from Peru. A short course was given by Professor Victor Hugo Lachos Davila.



IWAP 2018

The Ninth International Workshop in Applied Probability

By Joseph Glaz

The International Workshop in Applied Probability 2018, IWAP 2018, was held on June 18-21, 2018, at Eötvös Loránd University, Budapest, Hungary. It was co-chaired by Joseph Glaz and László Márkus, Eötvös Loránd University. The Scientific Committee with guidance from the IWAP International Board: Joseph Glaz, University of Connecticut, USA, Jürg Hüsler, University of Bern, Switzerland, Nikolaos Limnios, Technical University of Compiègne, France, Markos Koutras, University of Piraeus, Greece, and José Luis Palacios, University of New Mexico, USA and University of Simón Bolívar, Venezuela, have played a major role in organizing the technical sessions at this workshop.

The aim of this workshop was to bring together and to foster exchanges among scientists working on applications of probability to any field, including: actuarial science, biology, communication theory, computer science, economics, engineering, epidemiology, finance, geography, linguistics, medicine, meteorology, operations research, psychology, quality control, reliability theory, and statistics.

This conference was attended by 319 participants from 38 countries from all over the globe. The scientific program included 6 plenary lectures delivered by distinguished scientists in the area of probability and its applications: Jean Bertoin, University of Zürich, Switzerland, Peter Friz, Technical University, Berlin, Germany, Ioannis Karatzas Columbia University, New York, USA, Yulia Mishura, National Taras Shevchenko University of Kyiv, Ukraine, Shige Peng, Shandong University, China, and Victor Perez-Abreu, Center for Research in Mathematics, Guanajuato, México. The program also included 56 invited sessions, 26 contributed sessions and one poster session. The participants at IWAP 2018 had the opportunity to attend several cultural events and enjoy a Gala Dinner, while cruising the Danube.

IWAP 2018 followed the success of the eight former IWAP's that took place at the University of Simon Bolivar, Caracas, Venezuela (2002), University of Piraeus, Greece (2004), University of Connecticut, Storrs, USA (2006), Université Technologie de Compiègne, Compiègne, France (2008), Universidad Carlos III de Madrid, Colmenarejo Campus, Spain (2010), Inbal Hotel, Jerusalem, Israel (2012), Kervansary Lara Hotel & Convention Center, Antalya, Turkey and University of Toronto, Sheraton Centre Hotel, Toronto, Canada (2016). Selected research publications from participants at IWAP 2002 have been published in research monograph "Recent Advances in Applied Probability" of Springer. Selected presentations from IWAP 2002, 2004, 2006, 2008, 2010, 2012 and 2014 have been published in special journal issues of Methodology and Computing in Applied Probability, Springer Nature.

László Márkus and Markos Koutras are the Guest Editors of the special issue of Methodology and Computing in Applied Probability that will include research articles based on presentations at IWAP 2018. IWAP 2002, 2004, 2006, 2008, 2010, 2012 and 2014 and 2018 have been co-sponsored by the Bernoulli Society or the Institute of Mathematical Statistics, among other sponsoring organizations. Financial support was provided by several organizations, including: hosting academic institutions, Institute of Mathematical Statistics, National Security Agency, Office of Naval Research and Taylor and Francis Group.

IWAP 2018 has been awarded the honorary title Eötvös Loránd Conference. The local organizing committee, chaired by Professor László Márkus, Eötvös Loránd University, have done a great job in organizing IWAP 2018. The Technical Organizer, CONGRESS Ltd., under the leadership of its General Manager, Judit Stefkó, provided great technical support for the participants of IWAP 2018.

Joseph Glaz (joseph.glaz@uconn.edu)

Alumni News

Dr. Zhen Chen has been promoted to senior investigator at the Biostatistics & Bioinformatics Branch at the Eunice Kennedy Shriver National Institute of Child Health & Human Development of National Institute of Health (NICHD of NIH).

Dr. Yu-Bo Wang has completed his post-doctoral training at NICHD of NIH. He has joined the Department of Mathematical Sciences at Clemson University as a tenure track assistant professor this fall.

Mr. Xinming Hao is currently an Associate Director Biostatistics at Shire

Dr. Fang Yu has been promoted to Professor, in the Department of Biostatistics, College of Public Health, University of Nebraska Medical Center. She has also been the director of Center for Collaboration on Research Design and Analysis at the same college.

Ms. Jennifer Park graduated from our undergraduate program in 2017, has started at the University of Virginia graduate program this fall with full support.

Qihao Zhang (MS program) has started at the Ph.D. program of Iowa State University this fall with full support.

Ninghan Duan (MS program) has started at the Biostatistics Ph.D. program of University of Miami this fall with full support.

Gregory J. Matthews had his second kid.

Chantal Larose (PhD, Statistics, UConn, 2015) and her father Daniel Larose (PhD, Statistics, UConn, 1996) have co-authored their third data science textbook together. "Data Science Using Python and R" (Wiley) is to appear in 2019. She is also currently developing ECSU's Data Science concentration. Finally, Chantal enjoyed seeing the gang again at the UConn lunch in Vancouver.

Ashok Chaurasia was one of the recipients of Canada's NSERC Discovery Grant (2018) to fund his research for 5 years.

Student News



Graduate Student Committee 2018-2019

Left to right: Hongfei Li, Austin Menger, Meiruo Xiang, Zhongmao Liu, Jiaqi Li, Zhenyi Huang, Shihua Tian, Qingyang Liu, Xinyi Tang, Yang Liu, Yuhan Bi, Xuan Zhang, Wei Shi, Prince Allotey, Xiaokang Liu, Jieying Jiao, Yishu Xue.

The Graduate Student Committee is dedicated to serving the graduate students and working closely with the department's faculty members to organize social and academic events. This year, as the graduate study body grows drastically, the Committee has also expanded from 12 members to 24 members in total. We have a nice mixture of master students and PhD students from various backgrounds. The Committee assisted faculty members in organizing the annual department picnic this year and it was a wonderful event. The Committee is grateful for the generous support from the department and will continue to provide excellent service to the graduate students.

Officers:

Jieying Jiao, President
Xuan Zhang, Vice President
Qingyang Liu, Treasurer
Austin Menger, Secretary
Jieying Jiao, GSS Senator
Xiaokang Liu, GSS Senator

Members:

Boyi Zhang, Disheng Mao, Hongfei Li, Jiaqi Li, Jono Brody-felber, Meiruo Xiang, Prince Allotey, Renjie Chen, Shihua Tian, Wei Shi, Xiaokang Liu, Xinyi Tang, Xiuyuan Liu, Yang Liu, Yishu Xue, Yiwei Ma, Yixin Xiang, Yuhan Bi, Zhenyi Huang, Zhongmao Liu

Student Awards

Prince Allotey

Awarded a Researcher Travel Scholarship Award, Summer Institute on Analysis of Ecological Momentary Assessment Data, The Pennsylvania State University, 2018.

Shariq Mohammed:

July 28 - August 2, 2018: Received travel award to attend Joint Statistical Meetings in Vancouver, Canada.

May 16-19, 2018: Received travel award to attend Symposium on Data Science and Statistics in Reston, Virginia.

March 26-28, 2018: Received travel award to attend BayesComp in Barcelona, Spain.

December 27-30, 2017: Received travel award to attend International Indian Statistical Association Annual Conference in Hyderabad, India.

October 26-29, 2017: Received travel award to attend Institute on Teaching and Mentoring in Atlanta, Georgia.

Gregory Vaughan

Student paper award at the Student Paper Competition of the Mental Health Section of the American Statistical Association, the 2017 Joint Statistical Meeting.

Wenjie Wang

IBM Student Paper Award at the 31st New England Statistics Symposium 2017.

Yishu Xue:

International Biometric Society Eastern North American Region's (ENAR) Distinguished Student Paper Awards for the 2019 ENAR Spring Meeting in Philadelphia, PA. The award recognizes her paper entitled "An Online Updating Approach for Testing the Proportional Hazards Assumption with Streams of Big Survival Data", co-authored with Profs. HaiYing Wang, Jun Yan, and Elizabeth Schifano.

UConn Central Utility Plant Consulting Project

Since Fall 2016, a team of SCS consultants has led development of a suite of statistical techniques, interactive data visualizations, and automated monitoring systems to support energy management at UCONN. A collaboration with the University's Facilities Operations, the project has been led by Professor Ming-Hui Chen and PhD student Henry Linder, and this semester includes participation by Professor Nalini Ravishanker, postdoctoral researcher Guanyu Hu, and PhD student Renjie Chen. In total, the project has cumulatively involved more than 24 active participants, including representatives from UCONN's Facilities and Budget offices, as well all stages of graduate and undergraduate students in the statistics department.

The project's scope broadly focuses on statistical monitoring of energy usage across more than 395 buildings at the University, on datasets ranging from high-frequency to monthly data. The consulting team pursues several areas, including exploratory analysis, data visualization, and interactive data science applications, deployment of statistical models to production environments at UCONN, and data architecture and management.



The project has included methods addressing two types of data: a cluster analysis procedure and regression model for utility consumption observed at a monthly frequency, applied to automated monitoring of more than 500 utility account time series, collected over more than 10 years. Under active development are time series models for sensor observations collected at 15-minute intervals in each building on campus, supplied by UCONN's on-site power plant. In parallel, the consulting team continues research into statistical graphics and statistical methods for stream data.

Attention, Alumni!

We want to hear from you!

UConn Statistics Alumni:

We would love an update on your current activities. Please send updates (professional and/or personal) to a.luis@uconn.edu to be included in the next issue of the newsletter. Please be sure to include the year you graduated and the degree received in your email.

Interested in supporting the department? We welcome alumni donations, which may be used for graduate fellowships, travel awards that allows faculty and students to present their research at conferences, and for special events such as seminars and lectures. Please contact us for more information on how you can support the Department of Statistics.

Thank you and we look forward to hearing from you!
The Department of Statistics

Department Directory

Robert Apruzese, Adjunct Lecturer

robert.apruzese@uconn.edu

Haim Bar, Assistant Professor

haim.bar@uconn.edu

Tracy Burke, Secretary

tracy.burke@uconn.edu

Joseph Cappelleri, Adjunct Professor (Pfizer, Inc.)

joseph.c.cappelleri@pfizer.com

Kun Chen, Assistant Professor

kun.chen@uconn.edu

Ming-Hui Chen, Professor and Head

ming-hui.chen@uconn.edu

Zhiyi Chi, Professor and Associate Head

zhiyi.chi@uconn.edu

Victor Hugo Lachos Davila, Professor

hlachos@uconn.edu

Dipak K. Dey, Distinguished Professor

dipak.dey@uconn.edu

Joseph Glaz, Professor

joseph.glaz@uconn.edu

Yuwen Gu, Assistant Professor

yuwen.gu@uconn.edu

Ofer Harel, Professor

ofer.harel@uconn.edu

Kent Holsinger, EEB Joint Appointment

kent.holsinger@uconn.edu

Tania Huedo-Medina, Allied Health Joint Appointment

tania.huedo-medina@uconn.edu

Lynn Kuo, Professor	lynn.kuo@uconn.edu
Amir Kouzehkanani, Adjunct Lecturer	amir.kouzehkanani@uconn.edu
Paul Lewis, EEB Joint Appointment	paul.lewis@uconn.edu
Néhémy Lim, Visiting Assistant Professor	nehemy.lim@uconn.edu
Anthony Luis, Program Assistant	a.luis@uconn.edu
Suman Majumdar, Associate Professor (Stamford)	suman.majumdar@uconn.edu
Kathleen McLaughlin, Adjunct Lecturer	kathleen.mclaughlin@uconn.edu
Nitis Mukhopadhyay, Professor	nitis.mukhopadhyay@uconn.edu
Vladimir Pozdnyakov, Professor and Director of Financial Math	vladimir.pozdnyakov@uconn.edu
Zhanna Pozdnyakova, Adjunct Lecturer	zhanna.pozdnyakova@uconn.edu
Nalini Ravishanker, Professor	nalini.ravishanker@uconn.edu
Elizabeth Schifano, Assistant Professor	elizabeth.schifano@uconn.edu
Naitee Ting, Adjunct Professor (Boehringer-Ingelheim)	naitee.ting@boehringer-ingelheim.com
Emiliano Valdez, Math Joint Appointment	valdezea@uconn.edu
Richard Vitale, Professor	r.vitale@uconn.edu
Stephen Walsh, School of Nursing Joint Appointment	stephen.walsh@uconn.edu
HaiYing Wang, Assistant Professor	haiying.wang@uconn.edu
Xiaojing Wang, Assistant Professor	xiaojing.wang@uconn.edu
Jun Yan, Professor	jun.yan@uconn.edu
Panpan Zhang, Visiting Assistant Professor	panpan.zhang@uconn.edu
Yuping Zhang, Assistant Professor	yuping.zhang@uconn.edu

